SOAP API Developer Guide

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@salesforcedocs
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GETTING STARTED

CHAPTER 1 Introducing SOAP API

In this chapter ...

Salesforce provides programmatic access to your org's information using simple, powerful, and secure application programming interfaces. To use this document, you should have a basic familiarity with software development, web services, and the Salesforce user interface.

Any functionality described in this guide is available if your org has the API feature enabled. This feature is enabled by default for Performance, Unlimited, Enterprise, and Developer Editions. Some Professional Edition orgs have the API enabled. If you can't access the features you see in this guide, contact Salesforce.

Note: Salesforce Education Services offers a suite of training courses to enable developers to design, create, integrate, and extend applications built on the Lightning platform. Be sure to visit http://www.salesforce.com/training to learn more.

When to Use the SOAP API

The Salesforce prebuilt applications provide powerful CRM functionality. In addition, Salesforce provides the ability to customize the prebuilt applications to fit your organization. However, your organization may have complex business processes that are unsupported by the existing functionality. In this case, Lightning Platform provides various ways for advanced administrators and developers to build custom functionality. These include SOAP API, Apex, and Visualforce.

SOAP API

Use SOAP API to create, retrieve, update or delete records, such as accounts, leads, and custom objects. With more than 20 different calls, SOAP API also allows you to maintain passwords, perform searches, and much more. Use SOAP API in any language that supports web services.

REST API

REST API provides a powerful, convenient, and simple REST-based web services interface for interacting with Salesforce. Its advantages include ease of integration and development, and it's an excellent choice of technology for use with mobile applications and web projects. For certain projects, you may want to use REST API with other Salesforce REST APIs. To build UI for creating, reading, updating, and deleting records, including building UI for list views, actions, and dependent picklists, use User Interface API. To build UI for B2B Commerce on Lightning, CMS managed content, Experience Cloud sites, or Chatter, use Connect REST API. If you have many records to process, consider using Bulk API, which is based on REST principles and optimized for large sets of data.

Bulk API

Bulk API is based on REST principles and is optimized for loading or deleting large sets of data. You can use it to query, queryAll, insert, update, upsert, or delete many records asynchronously by submitting batches. Salesforce processes batches in the background.

SOAP API, in contrast, is optimized for real-time client applications that update a few records at a time. You can use SOAP API for processing many records, but when the data sets contain hundreds of thousands of records, SOAP API is less practical. Bulk API is designed to make it simple to process data from a few thousand to millions of records.

Metadata API

Use Metadata API to retrieve, deploy, create, update, or delete customizations for your org. The most common use is to migrate changes from a sandbox or testing org to your production environment. Metadata API is intended for managing customizations and for building tools that can manage the metadata model, not the data itself.

The easiest way to access the functionality in Metadata API is to use the Salesforce Extensions for Visual Studio Code or the Ant Migration Tool. Both tools are built on top of Metadata API and use the standard tools to simplify working with Metadata API.

- The Salesforce Extensions for Visual Studio Code includes tools for developing on the Salesforce platform in the lightweight, extensible VS Code editor. These tools provide features for working with development orgs (scratch orgs, sandboxes, and DE orgs), Apex, Aura components, and Visualforce.
- The Ant Migration Tool is ideal if you use a script or the command line for moving metadata between a local directory and a Salesforce org.

Apex

Use Apex if you want to:

- Create Web services.
- Create email services.
- Perform complex validation over multiple objects.
- Create complex business processes that are not supported by workflow.
- Create custom transactional logic (logic that occurs over the entire transaction, not just with a single record or object).
- Attach custom logic to another operation, such as saving a record, so that it occurs whenever the operation is executed, regardless of whether it originates in the user interface, a Visualforce page, or from SOAP API.

For more information, see the *Apex Developer Guide*.

Visualforce

Visualforce consists of a tag-based markup language that gives developers a more powerful way of building applications and customizing the Salesforce user interface. With Visualforce you can:

- Build wizards and other multistep processes.
- Create your own custom flow control through an application.
- Define navigation patterns and data-specific rules for optimal, efficient application interaction.

For more information, see the *Visualforce Developer's Guide*.

Customize, Integrate, and Extend Your Salesforce Solutions

The Lightning Platform allows you to customize, integrate, and extend your Salesforce organization using the language and platform of your choice:

- **Customize Salesforce** with custom fields, links, objects, page layouts, buttons, record types, s-controls, and tabs to meet specific business requirements.
- **Integrate Salesforce** with your org's ERP and finance systems. Deliver real-time sales and support information to company portals and populate critical business systems with customer information.
- **Extend Salesforce** in presentation, business logic, and data services with new functionality that reflects the business requirements of your org.

For more information about Lightning Platform solutionsand developer resources, go to Salesforce Developers.

Supported Salesforce Editions

To use SOAP API, your org must use Enterprise Edition, Performance Edition, Unlimited Edition, or Developer Edition. If you're an existing Salesforce customer and want to upgrade to Enterprise, Unlimited, or Performance Edition, contact your account representative.

It is recommended that you use Developer Sandbox to develop Web service client applications. Developer Sandbox is an exact replica of your Salesforce deployment, including all customization and data. For more information, see Deploy Enhancements from Sandboxes.

Developer Edition provides access to all features available with Enterprise Edition. Developer Edition is constrained only by the number of users and the amount of storage space. Developer Edition provides a development context that allows you to build and test your solutions without affecting your org's live data. Developer Edition accounts are available for free at `developer.salesforce.com/gettingstarted`.

Standards Compliance

SOAP API is implemented to comply with the following specifications:

Standard Name	Website
Simple Object Access Protocol (SOAP) 1.1	https://www.w3.org/TR/2000/NOTE-SOAP-20000508/
Web Service Description Language (WSDL) 1.1	http://www.w3.org/TR/2001/NOTE-wsdl-20010315
WS-I Basic Profile 1.1	http://www.ws-i.org/Profiles/BasicProfile-1.1-2004-08-24.html

Development Platforms

SOAP API works with current SOAP development environments, including, but not limited to, Visual Studio .NET 2005. In this document, we provide examples in Java and C# (.NET). The Java examples are based on WSC 20.0 (WSC) and JDK 6 (Java Platform Standard Edition Development Kit 6). Other versions of WSC are available at `https://github.com/forcedotcom/wsc` and `http://mvnrepository.com/artifact/com.force.api/force-wsc`. To see a complete list of compatible development platforms and more sample code, go to `developer.salesforce.com`.

Note: Development platforms vary in their SOAP implementations. Implementation differences in certain development platforms might prevent access to some or all features of the API. If you are using Visual Studio for .NET development, we recommend that you use Visual Studio 2003 or higher.

SOAP API Support Policy

Salesforce recommends that your new client applications use the most recent version of the Lightning Platform WSDL file to fully exploit the benefits of richer features and greater efficiency. You can navigate to the most recent WSDL for your organization from Setup by entering *API* in the Quick Find box, then selecting **API**. When a new version is released, use the following steps in Quick Start to update your WSDL:

- Regenerate the WSDL file (see Step 2: Generate or Obtain the Web Service WSDL)
- Import it into your environment (see Step 3: Import the WSDL File Into Your Development Platform)

Backward Compatibility

Salesforce strives to make backward compatibility easy when using the Lightning platform.

Each new Salesforce release consists of two components:

- A new release of platform software that resides on Salesforce systems
- A new version of SOAP API

For example, the Winter '07 release included SOAP API version 9.0 and the Summer '07 release included SOAP API version 10.0.

We maintain support for each SOAP API version across releases of the platform software. SOAP API is backward compatible in that an application created to work with a given SOAP API version will continue to work with that same SOAP API version in future platform software releases.

Salesforce does not guarantee that an application written against one SOAP API version will work with future SOAP API versions: Changes in method signatures and data representations are often required as we continue to enhance SOAP API. However, we strive to keep SOAP API consistent from version to version with minimal, if any, changes required to port applications to newer SOAP API versions.

For example, an application written using SOAP API version 9.0 which shipped with the Winter '07 release will continue to work with SOAP API version 9.0 on the Summer '07 release and on future releases beyond that. However, that same application may not work with SOAP API version 10 without modifications to the application.

API End-of-Life

Salesforce is committed to supporting each API version for a minimum of three years from the date of first release. In order to mature and improve the quality and performance of the API, versions that are more than three years old might cease to be supported.

When an API version is to be deprecated, advance notice is given at least one year before support ends. Salesforce will directly notify customers using API versions planned for deprecation.

Note: Versions 7.0 through 20.0 of SOAP API will be retired in the Summer '21 release. For more information, see Knowledge Article: Lightning Platform API legacy versions retirement.

Choosing a WSDL

There are two Lightning Platform Web services for which you can obtain WSDL files for API access:

- **Lightning Platform Enterprise WSDL**—This API is for most enterprise users who are developing client applications for their org. The enterprise WSDL file is a strongly typed representation of your org's data. It provides information about your schema, data types, and fields to your development environment, allowing for a tighter integration between it and the Lightning Platform Web service. This WSDL changes if custom fields or custom objects are added to, renamed, or removed from, your org's Salesforce configuration. If you are downloading an enterprise WSDL and you have managed packages installed in your organization, you need to take an extra step to select the version of each installed package to include in the generated WSDL.

  Note the following when generating the enterprise WSDL:

  - If new custom fields or objects are added to, renamed, or removed from your org's information, you must regenerate the WSDL file to access them.
  - The generated WSDL contains the objects and fields in your org, including those available in the selected versions of each installed package. If a field or object is added in a later package version, you must generate the enterprise WSDL with that package version to work with the object or field in your API integration.

- **Lightning Platform Partner WSDL**—This API is for Salesforce partners who are developing client applications for multiple orgs. As a loosely-typed representation of the Salesforce object model, the partner WSDL can be used to access data within any org.

Related Resources

The Salesforce developer website provides a full suite of developer toolkits, sample code, sample SOAP messages, community-based support, and other resources to help you with your development projects. Be sure to visit `developer.salesforce.com/gettingstarted` for more information, or visit `developer.salesforce.com/signup` to sign up for a free Developer Edition account.

You can visit these websites to find out more about Salesforce applications:

- Salesforce for information about the Salesforce application.

- Salesforce AppExchange for access to apps created for Salesforce.
- Trailblazer Community for services to ensure Salesforce customer success.

Quick Start

Use this quick start to create a sample application in your development environment.

Note: Before you begin building an integration or other client application:

- Install your development platform according to its product documentation.
- Read through all the steps before beginning this quick start. You may also wish to review the rest of this document to familiarize yourself with terms and concepts.

Step 1: Obtain a Salesforce Developer Edition Organization

If you are not already a member of the Lightning Platform developer community, go to `developer.salesforce.com/signup` and follow the instructions for signing up for a Developer Edition organization. Even if you already have Enterprise Edition, Unlimited Edition, or Performance Edition, use Developer Edition for developing, staging, and testing your solutions against sample data to protect your organization's live data. This is especially true for applications that insert, update, or delete data (as opposed to simply reading data).

If you already have a Developer Edition organization, verify that you have the API Enabled permission. This permission is enabled by default, but may have been changed by an administrator. For more information, see the help in the Salesforce user interface.

Step 2: Generate or Obtain the Web Service WSDL

To access the Lightning Platform Web service, you need a Web Service Description Language (WSDL) file. The WSDL file defines the Web service that is available to you. Your development platform uses this WSDL to generate an API to access the Lightning Platform Web service it defines. You can either obtain the WSDL file from your organization's Salesforce administrator or you can generate it yourself if you have access to the WSDL download page in the Salesforce user interface. You can navigate to the most recent WSDL for your organization from Setup by entering *`API`* in the Quick Find box, then selecting **API**.

For more information about WSDL, see `http://www.w3.org/TR/wsdl`.

Generating the WSDL File for Your Organization

Any user with the Modify All Data permission can download the Web Services Description Language (WSDL) file to integrate and extend Salesforce using the API. (The System Administrator profile has this permission.)

The WSDL file is dynamically generated based on which type of WSDL file (enterprise or partner) you download. The generated WSDL defines all of the API calls, objects (including standard and custom objects), and fields that are available for API access for your organization.

To generate the WSDL file for your organization:

1. Log in to your Enterprise, Unlimited, Performance, or Developer Edition Salesforce account. You must log in as an administrator or as a user who has the "Modify All Data" permission. Logins are checked to ensure they are from a known IP address. For more information, see "Restrict Where and When Users Can Log In to Salesforce" in the Salesforce online help.
2. From Setup, enter *`API`* in the Quick Find box, then select **API** to display the WSDL download page.
3. Download the appropriate WSDL:
   - If you're downloading an enterprise WSDL and you have managed packages installed in your org, click **Generate Enterprise WSDL**. Salesforce prompts you to select the version of each installed package to include in the generated WSDL.

- Otherwise, right-click the link for the appropriate WSDL document to save it to a local directory. In the menu, Internet Explorer users can choose **Save Target As**, while Mozilla Firefox users can choose **Save Link As**.

Step 3: Import the WSDL File Into Your Development Platform

Once you have the WSDL file, you need to import it into your development platform so that your development environment can generate the necessary objects for use in building client Web service applications in that environment. This section provides sample instructions for WSC and Microsoft Visual Studio. For instructions about other development platforms, see your platform's product documentation.

Note: The process for importing WSDL files is identical for the enterprise and partner WSDL files.

Instructions for Java Environments (WSC)

Java environments access the API through Java objects that serve as proxies for their server-side counterparts. Before using the API, you must first generate these objects from your organization's WSDL file.

Each SOAP client has its own tool for this process. For WSC, use the `wsdlc` utility.

Note: Before you run `wsdlc`, you must have the WSC JAR file installed on your system and referenced in your classpath.

The basic syntax for `wsdlc` is:

```
java -classpath pathToJAR/wsc-22.jar com.sforce.ws.tools.wsdlc pathToWsdl/WsdlFilename
pathToOutputJar/OutputJarFilename
```

This command generates an output jar file based on the specified WSDL file. After the output jar file is created, reference it along with the wsc jar file (for example, wsc-22.jar) in your Java program to create a client application.

Instructions for Microsoft Visual Studio

Visual Studio languages access the API through objects that serve as proxies for their server-side counterparts. Before using the API, you must first generate these objects from your organization's WSDL file.

Once you have the proxy classes for the server-side objects, you need to ensure that you specify whether you have set any values on non-string fields. For more information, see Implementation Considerations.

Visual Studio provides two approaches for importing your WSDL file and generating an XML Web service client: an IDE-based approach and a command line approach. This walkthrough describes how to import your WSDL file through the IDE.

Note: Before you begin, the first step is to create a new application or open an existing application in Visual Studio. In addition, you need to have generated the WSDL file, as described in Generating the WSDL File for Your Organization.

An XML Web service client is any component or application that references and uses an XML Web service. This does not necessarily need to be a client-based application. In fact, in many cases, your XML Web service clients might be other Web applications, such as Web Forms or even other XML Web services. When accessing XML Web services in managed code, a proxy class and the .NET Framework handle all of the infrastructure coding.

To access an XML Web service from managed code:

1. Name your project `Walkthrough` or change the `using` directive in the following sample to *`your_project_name.web_reference_name`*. Then, add a Web reference to your project for the XML Web service that you want to access. The Web reference creates a proxy class with methods that serve as proxies for each exposed method of the XML Web service.
2. Add the namespace for the Web reference.

3. Create an instance of the proxy class and then access the methods of that class as you would the methods of any other class.

You can add either a .NET 2.0 style Web reference, or a .NET 3.0 style Service reference, depending on your version of Visual Studio and preferred developer environment. A .NET 3.0 style reference uses services like SoapClient instead of SforceService.

To add a Web reference:

Note: These steps may be different depending on the version of Visual Studio that you're using. For more information, see "Adding and Removing Web References" in the Visual Studio documentation.

1. If you are using Visual Studio 2010 or earlier, on the Project menu, choose **Add Web Reference.** For later versions of Visual Studio, on the Project menu, choose **Add Service Reference**, select **Advanced** and then select **Add Web Reference**.
2. In the URL box of the Add Web Reference dialog box, type the URL to obtain the service description of the XML Web service you want to access, such as:

   `c:\WSDLFiles\enterprise.wsdl`

3. Click **Go** to retrieve information about the XML Web service.
4. In the Web reference name box, rename the Web reference to `sforce`, which is the name you will use for this Web reference.
5. Click **Add Reference** to add a Web reference for the target XML Web service.
6. Visual Studio retrieves the service description and generates a proxy class to interface between your application and the XML Web service.

Note: If you are using Visual Basic .Net 1.1 and the enterprise WSDL, you will need to modify the generated Web service client to overcome a bug in Visual Studio's client generation utility. The API exposes two objects (Case and Event) whose names conflict with Visual Basic keywords. When the classes that represent these objects are created, Visual Studio wraps the class names with brackets (`[Case]` and `[Event]`). This is the method by which you can reuse keywords.

Unfortunately, in the definition of the `sObject` class, Visual Studio does not wrap Case and Event to class references in the `System.Xml.Serialization.XmlIncludeAttribute` that are part of the `sObject` definition. To work around this problem in Visual Studio, you need to edit the `XmlIncludeAttribute` settings for Case and Event as shown below. This does not apply to C# and only applies when using the enterprise version of the WSDL.

```
    System.Xml.Serialization.XmlIncludeAttribute(GetType([Event])), _

    System.Xml.Serialization.XmlIncludeAttribute(GetType([Case])), _
```

Step 4: Walk Through the Sample Code

Once you have imported your WSDL file, you can begin building client applications that use the API. Use the following samples to create a basic client application. Comments embedded in the sample explain each section of code.

Java Sample Code

This section walks through a sample Java client application that uses the WSC SOAP client. The purpose of this sample application is to show the required steps for logging into the login server and to demonstrate the invocation and subsequent handling of several API calls.

To run this sample, you must pass the authentication endpoint URL as an argument for your program. You can obtain this URL from the WSDL file. This sample application performs the following main tasks:

1. Prompts the user for their Salesforce username and password.

2. Calls `login()` to log in to the single login server and, if the login succeeds, retrieves user information and writes it to the console along with session information.
3. Calls `describeGlobal()` to retrieve a list of all available objects for the organization's data. The `describeGlobal` method determines the objects that are available to the logged in user. This call should not be made more than once per session, since the data returned from the call is not likely to change frequently. The DescribeGlobalResult is echoed to the console.
4. Calls `describeSObjects()` to retrieve metadata (field list and object properties) for a specified object. The `describeSObject` method illustrates the type of metadata information that can be obtained for each object available to the user. The sample client application executes a `describeSObjects()` call on the object that the user specifies and then echoes the returned metadata information to the console. Object metadata information includes permissions, field types and lengths, and available values for picklist fields and types for `referenceTo` fields.
5. Calls `query()`, passing a simple query string `("SELECT FirstName, LastName FROM Contact")`, and iterating through the returned QueryResult.
6. Calls `logout()` to the log the user out.

The following sample code uses try/catch blocks to handle exceptions that might be thrown by the API calls.

```
package com.example.samples;

import java.io.BufferedReader;
import java.io.FileNotFoundException;
import java.io.InputStreamReader;
import java.io.IOException;
import com.sforce.soap.enterprise.DeleteResult;
import com.sforce.soap.enterprise.DescribeGlobalResult;
import com.sforce.soap.enterprise.DescribeGlobalSObjectResult;
import com.sforce.soap.enterprise.DescribeSObjectResult;
import com.sforce.soap.enterprise.EnterpriseConnection;
import com.sforce.soap.enterprise.Error;
import com.sforce.soap.enterprise.Field;
import com.sforce.soap.enterprise.FieldType;
import com.sforce.soap.enterprise.GetUserInfoResult;
import com.sforce.soap.enterprise.LoginResult;
import com.sforce.soap.enterprise.PicklistEntry;
import com.sforce.soap.enterprise.QueryResult;
import com.sforce.soap.enterprise.SaveResult;
import com.sforce.soap.enterprise.sobject.Account;
import com.sforce.soap.enterprise.sobject.Contact;
import com.sforce.soap.enterprise.sobject.SObject;
import com.sforce.ws.ConnectorConfig;
import com.sforce.ws.ConnectionException;

public class QuickstartApiSample {

   private static BufferedReader reader = new BufferedReader(
         new InputStreamReader(System.in));

   EnterpriseConnection connection;
   String authEndPoint = "";

   public static void main(String[] args) {
      if (args.length < 1) {
         System.out.println("Usage: com.example.samples."
```

```
                + "QuickstartApiSamples <AuthEndPoint>");

            System.exit(-1);
        }

        QuickstartApiSample sample = new QuickstartApiSample(args[0]);
        sample.run();
    }

    public void run() {
        // Make a login call
        if (login()) {
            // Do a describe global
            describeGlobalSample();

            // Describe an object
            describeSObjectsSample();

            // Retrieve some data using a query
            querySample();

            // Log out
            logout();
        }
    }

    // Constructor
    public QuickstartApiSample(String authEndPoint) {
        this.authEndPoint = authEndPoint;
    }

    private String getUserInput(String prompt) {
        String result = "";
        try {
            System.out.print(prompt);
            result = reader.readLine();
        } catch (IOException ioe) {
            ioe.printStackTrace();
        }

        return result;
    }

    private boolean login() {
        boolean success = false;
        String username = getUserInput("Enter username: ");
        String password = getUserInput("Enter password: ");

        try {
            ConnectorConfig config = new ConnectorConfig();
            config.setUsername(username);
            config.setPassword(password);

            System.out.println("AuthEndPoint: " + authEndPoint);
```

```
      config.setAuthEndpoint(authEndPoint);

      connection = new EnterpriseConnection(config);
      printUserInfo(config);

      success = true;
    } catch (ConnectionException ce) {
      ce.printStackTrace();
    }

    return success;
  }

  private void printUserInfo(ConnectorConfig config) {
    try {
      GetUserInfoResult userInfo = connection.getUserInfo();

      System.out.println("\nLogging in ...\n");
      System.out.println("UserID: " + userInfo.getUserId());
      System.out.println("User Full Name: " + userInfo.getUserFullName());
      System.out.println("User Email: " + userInfo.getUserEmail());
      System.out.println();
      System.out.println("SessionID: " + config.getSessionId());
      System.out.println("Auth End Point: " + config.getAuthEndpoint());
      System.out
            .println("Service End Point: " + config.getServiceEndpoint());
      System.out.println();
    } catch (ConnectionException ce) {
      ce.printStackTrace();
    }
  }

  private void logout() {
    try {
      connection.logout();
      System.out.println("Logged out.");
    } catch (ConnectionException ce) {
      ce.printStackTrace();
    }
  }

  /**
   * To determine the objects that are available to the logged-in user, the
   * sample client application executes a describeGlobal call, which returns
   * all of the objects that are visible to the logged-in user. This call
   * should not be made more than once per session, as the data returned from
   * the call likely does not change frequently. The DescribeGlobalResult is
   * simply echoed to the console.
   */
  private void describeGlobalSample() {
    try {
      // describeGlobal() returns an array of object results that
      // includes the object names that are available to the logged-in user.
      DescribeGlobalResult dgr = connection.describeGlobal();
```

```
        System.out.println("\nDescribe Global Results:\n");
        // Loop through the array echoing the object names to the console
        for (int i = 0; i < dgr.getSobjects().length; i++) {
           System.out.println(dgr.getSobjects()[i].getName());
        }
     } catch (ConnectionException ce) {
        ce.printStackTrace();
     }
  }

  /**
   * The following method illustrates the type of metadata information that can
   * be obtained for each object available to the user. The sample client
   * application executes a describeSObject call on a given object and then
   * echoes the returned metadata information to the console. Object metadata
   * information includes permissions, field types and length and available
   * values for picklist fields and types for referenceTo fields.
   */
  private void describeSObjectsSample() {
     String objectToDescribe = getUserInput("\nType the name of the object to "
           + "describe (try Account): ");

     try {
        // Call describeSObjects() passing in an array with one object type
        // name
        DescribeSObjectResult[] dsrArray = connection
              .describeSObjects(new String[] { objectToDescribe });

        // Since we described only one sObject, we should have only
        // one element in the DescribeSObjectResult array.
        DescribeSObjectResult dsr = dsrArray[0];

        // First, get some object properties
        System.out.println("\n\nObject Name: " + dsr.getName());

        if (dsr.getCustom())
           System.out.println("Custom Object");
        if (dsr.getLabel() != null)
           System.out.println("Label: " + dsr.getLabel());

        // Get the permissions on the object

        if (dsr.getCreateable())
           System.out.println("Createable");
        if (dsr.getDeletable())
           System.out.println("Deleteable");
        if (dsr.getQueryable())
           System.out.println("Queryable");
        if (dsr.getReplicateable())
           System.out.println("Replicateable");
        if (dsr.getRetrieveable())
           System.out.println("Retrieveable");
        if (dsr.getSearchable())
```

```
            System.out.println("Searchable");
        if (dsr.getUndeletable())
            System.out.println("Undeleteable");
        if (dsr.getUpdateable())
            System.out.println("Updateable");

        System.out.println("Number of fields: " + dsr.getFields().length);

        // Now, retrieve metadata for each field
        for (int i = 0; i < dsr.getFields().length; i++) {
            // Get the field
            Field field = dsr.getFields()[i];

            // Write some field properties
            System.out.println("Field name: " + field.getName());
            System.out.println("\tField Label: " + field.getLabel());

            // This next property indicates that this
            // field is searched when using
            // the name search group in SOSL
            if (field.getNameField())
                System.out.println("\tThis is a name field.");

            if (field.getRestrictedPicklist())
                System.out.println("This is a RESTRICTED picklist field.");

            System.out.println("\tType is: " + field.getType());

            if (field.getLength() > 0)
                System.out.println("\tLength: " + field.getLength());

            if (field.getScale() > 0)
                System.out.println("\tScale: " + field.getScale());

            if (field.getPrecision() > 0)
                System.out.println("\tPrecision: " + field.getPrecision());

            if (field.getDigits() > 0)
                System.out.println("\tDigits: " + field.getDigits());

            if (field.getCustom())
                System.out.println("\tThis is a custom field.");

            // Write the permissions of this field
            if (field.getNillable())
                System.out.println("\tCan be nulled.");
            if (field.getCreateable())
                System.out.println("\tCreateable");
            if (field.getFilterable())
                System.out.println("\tFilterable");
            if (field.getUpdateable())
                System.out.println("\tUpdateable");

            // If this is a picklist field, show the picklist values
```

```
            if (field.getType().equals(FieldType.picklist)) {
               System.out.println("\t\tPicklist values: ");
               PicklistEntry[] picklistValues = field.getPicklistValues();

               for (int j = 0; j < field.getPicklistValues().length; j++) {
                  System.out.println("\t\tValue: "
                        + picklistValues[j].getValue());
               }
            }

            // If this is a foreign key field (reference),
            // show the values
            if (field.getType().equals(FieldType.reference)) {
               System.out.println("\tCan reference these objects:");
               for (int j = 0; j < field.getReferenceTo().length; j++) {
                  System.out.println("\t\t" + field.getReferenceTo()[j]);
               }
            }
            System.out.println("");
         }
      } catch (ConnectionException ce) {
         ce.printStackTrace();
      }
   }

   private void querySample() {
      String soqlQuery = "SELECT FirstName, LastName FROM Contact";
      try {
         QueryResult qr = connection.query(soqlQuery);
         boolean done = false;

         if (qr.getSize() > 0) {
            System.out.println("\nLogged-in user can see "
                  + qr.getRecords().length + " contact records.");

            while (!done) {
               System.out.println("");
               SObject[] records = qr.getRecords();
               for (int i = 0; i < records.length; ++i) {
                  Contact con = (Contact) records[i];
                  String fName = con.getFirstName();
                  String lName = con.getLastName();

                  if (fName == null) {
                     System.out.println("Contact " + (i + 1) + ": " + lName);
                  } else {
                     System.out.println("Contact " + (i + 1) + ": " + fName
                           + " " + lName);
                  }
               }

               if (qr.isDone()) {
                  done = true;
               } else {
```

```
                    qr = connection.queryMore(qr.getQueryLocator());
                }
            }
        } else {
            System.out.println("No records found.");
        }
    } catch (ConnectionException ce) {
        ce.printStackTrace();
    }
  }
}
```

C# Sample Code

This section walks through a sample C# client application. The purpose of this sample application is to show the required steps for logging in and to demonstrate the invocation and subsequent handling of several API calls.

This sample application performs the following main tasks:

1. Prompts the user for their Salesforce username and password.
2. Calls `login()` to log in to the single login server and, if the login succeeds:
   - Sets the returned `sessionId` into the session header, which is required for session authentication on subsequent API calls.
   - Resets the Lightning Platform endpoint to the returned `serverUrl`, which is the target of subsequent API calls.

     All client applications that access the API must complete the tasks in this step before attempting any subsequent API calls.
   - Retrieves user information and writes it to the console along with session information.
3. Calls `describeGlobal()` to retrieve a list of all available objects for the organization's data. The `describeGlobal` method determines the objects that are available to the logged in user. This call should not be made more than once per session, since the data returned from the call is not likely to change frequently. The DescribeGlobalResult is echoed to the console.
4. Calls `describeSObjects()` to retrieve metadata (field list and object properties) for a specified object. The `describeSObject` method illustrates the type of metadata information that can be obtained for each object available to the user. The sample client application executes a `describeSObjects()` call on the object that the user specifies and then echoes the returned metadata information to the console. Object metadata information includes permissions, field types and lengths, and available values for picklist fields and types for `referenceTo` fields.
5. Calls `query()`, passing a simple query string `("SELECT FirstName, LastName FROM Contact")`, and iterating through the returned QueryResult.
6. Calls `logout()` to the log the user out.

The following sample code uses try/catch blocks to handle exceptions that might be thrown by the API calls.

The following code begins the sample C# client application.

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Web.Services.Protocols;
using Walkthrough.sforce;

namespace Walkthrough
{
```

```
class QuickstartApiSample
{
   private SforceService binding;

   [STAThread]
   static void Main(string[] args)
   {
      QuickstartApiSample sample = new QuickstartApiSample();
      sample.run();
   }

   public void run()
   {
      // Make a login call
      if (login())
      {
         // Do a describe global
         describeGlobalSample();

         // Describe an account object
         describeSObjectsSample();

         // Retrieve some data using a query
         querySample();

         // Log out
         logout();
      }
   }

   private bool login()
   {
      Console.Write("Enter username: ");
      string username = Console.ReadLine();
      Console.Write("Enter password: ");
      string password = Console.ReadLine();

      // Create a service object
      binding = new SforceService();

      // Timeout after a minute
      binding.Timeout = 60000;

      // Try logging in
      LoginResult lr;
      try
      {

         Console.WriteLine("\nLogging in...\n");
         lr = binding.login(username, password);
      }

      // ApiFault is a proxy stub generated from the WSDL contract when
```

```
    // the web service was imported
    catch (SoapException e)
    {
       // Write the fault code to the console
       Console.WriteLine(e.Code);

       // Write the fault message to the console
       Console.WriteLine("An unexpected error has occurred: " + e.Message);

       // Write the stack trace to the console
       Console.WriteLine(e.StackTrace);

       // Return False to indicate that the login was not successful
       return false;
    }



    // Check if the password has expired
    if (lr.passwordExpired)
    {
       Console.WriteLine("An error has occurred. Your password has expired.");
       return false;
    }


    /** Once the client application has logged in successfully, it will use
     * the results of the login call to reset the endpoint of the service
     * to the virtual server instance that is servicing your organization
     */
    // Save old authentication end point URL
    String authEndPoint = binding.Url;
    // Set returned service endpoint URL
    binding.Url = lr.serverUrl;

    /** The sample client application now has an instance of the SforceService
     * that is pointing to the correct endpoint. Next, the sample client
     * application sets a persistent SOAP header (to be included on all
     * subsequent calls that are made with SforceService) that contains the
     * valid sessionId for our login credentials. To do this, the sample
     * client application creates a new SessionHeader object and persist it to
     * the SforceService. Add the session ID returned from the login to the
     * session header
     */
    binding.SessionHeaderValue = new SessionHeader();
    binding.SessionHeaderValue.sessionId = lr.sessionId;

    printUserInfo(lr, authEndPoint);

    // Return true to indicate that we are logged in, pointed
    // at the right URL and have our security token in place.
    return true;
 }
```

```
private void printUserInfo(LoginResult lr, String authEP)
{
   try
   {
      GetUserInfoResult userInfo = lr.userInfo;

      Console.WriteLine("\nLogging in ...\n");
      Console.WriteLine("UserID: " + userInfo.userId);
      Console.WriteLine("User Full Name: " +
          userInfo.userFullName);
      Console.WriteLine("User Email: " +
          userInfo.userEmail);
      Console.WriteLine();
      Console.WriteLine("SessionID: " +
          lr.sessionId);
      Console.WriteLine("Auth End Point: " +
          authEP);
      Console.WriteLine("Service End Point: " +
          lr.serverUrl);
      Console.WriteLine();
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " + e.Message +
          " Stack trace: " + e.StackTrace);
   }
}

private void logout()
{
   try
   {
      binding.logout();
      Console.WriteLine("Logged out.");
   }
   catch (SoapException e)
   {
      // Write the fault code to the console
      Console.WriteLine(e.Code);

      // Write the fault message to the console
      Console.WriteLine("An unexpected error has occurred: " + e.Message);

      // Write the stack trace to the console
      Console.WriteLine(e.StackTrace);
   }
}

/**
* To determine the objects that are available to the logged-in
* user, the sample client application executes a describeGlobal
* call, which returns all of the objects that are visible to
* the logged-in user. This call should not be made more than
* once per session, as the data returned from the call likely
```

```
* does not change frequently. The DescribeGlobalResult is
* simply echoed to the console.
*/
private void describeGlobalSample()
{
   try
   {
      // describeGlobal() returns an array of object results that
      // includes the object names that are available to the logged-in user.
      DescribeGlobalResult dgr = binding.describeGlobal();

      Console.WriteLine("\nDescribe Global Results:\n");
      // Loop through the array echoing the object names to the console

      for (int i = 0; i < dgr.sobjects.Length; i++)
      {
         Console.WriteLine(dgr.sobjects[i].name);
      }
   }
   catch (SoapException e)
   {
      Console.WriteLine("An exception has occurred: " + e.Message +
          "\nStack trace: " + e.StackTrace);
   }
}

/**
* The following method illustrates the type of metadata
* information that can be obtained for each object available
* to the user. The sample client application executes a
* describeSObject call on a given object and then echoes
* the returned metadata information to the console. Object
* metadata information includes permissions, field types
* and length and available values for picklist fields
* and types for referenceTo fields.
*/
private void describeSObjectsSample()
{
   Console.Write("\nType the name of the object to " +
       "describe (try Account): ");
   string objectType = Console.ReadLine();
   try
   {

      // Call describeSObjects() passing in an array with one object type name
      DescribeSObjectResult[] dsrArray =
            binding.describeSObjects(new string[] { objectType });

      // Since we described only one sObject, we should have only
      // one element in the DescribeSObjectResult array.
      DescribeSObjectResult dsr = dsrArray[0];

      // First, get some object properties
      Console.WriteLine("\n\nObject Name: " + dsr.name);
```

```
if (dsr.custom) Console.WriteLine("Custom Object");
if (dsr.label != null) Console.WriteLine("Label: " + dsr.label);

// Get the permissions on the object
if (dsr.createable) Console.WriteLine("Createable");
if (dsr.deletable) Console.WriteLine("Deleteable");
if (dsr.queryable) Console.WriteLine("Queryable");
if (dsr.replicateable) Console.WriteLine("Replicateable");
if (dsr.retrieveable) Console.WriteLine("Retrieveable");
if (dsr.searchable) Console.WriteLine("Searchable");
if (dsr.undeletable) Console.WriteLine("Undeleteable");
if (dsr.updateable) Console.WriteLine("Updateable");

Console.WriteLine("Number of fields: " + dsr.fields.Length);

// Now, retrieve metadata for each field
for (int i = 0; i < dsr.fields.Length; i++)
{
   // Get the field
   Field field = dsr.fields[i];

   // Write some field properties
   Console.WriteLine("Field name: " + field.name);
   Console.WriteLine("\tField Label: " + field.label);

   // This next property indicates that this
   // field is searched when using
   // the name search group in SOSL
   if (field.nameField)
      Console.WriteLine("\tThis is a name field.");

   if (field.restrictedPicklist)
      Console.WriteLine("This is a RESTRICTED picklist field.");

   Console.WriteLine("\tType is: " + field.type.ToString());

   if (field.length > 0)
      Console.WriteLine("\tLength: " + field.length);

   if (field.scale > 0)
      Console.WriteLine("\tScale: " + field.scale);

   if (field.precision > 0)
      Console.WriteLine("\tPrecision: " + field.precision);

   if (field.digits > 0)
      Console.WriteLine("\tDigits: " + field.digits);

   if (field.custom)
      Console.WriteLine("\tThis is a custom field.");

   // Write the permissions of this field
   if (field.nillable) Console.WriteLine("\tCan be nulled.");
```

```
            if (field.createable) Console.WriteLine("\tCreateable");
            if (field.filterable) Console.WriteLine("\tFilterable");
            if (field.updateable) Console.WriteLine("\tUpdateable");

            // If this is a picklist field, show the picklist values
            if (field.type.Equals(fieldType.picklist))
            {
               Console.WriteLine("\tPicklist Values");
               for (int j = 0; j < field.picklistValues.Length; j++)
                  Console.WriteLine("\t\t" + field.picklistValues[j].value);
            }

            // If this is a foreign key field (reference),
            // show the values
            if (field.type.Equals(fieldType.reference))
            {
               Console.WriteLine("\tCan reference these objects:");
               for (int j = 0; j < field.referenceTo.Length; j++)
                  Console.WriteLine("\t\t" + field.referenceTo[j]);
            }
            Console.WriteLine("");
         }
      }
      catch (SoapException e)
      {
         Console.WriteLine("An exception has occurred: " + e.Message +
             "\nStack trace: " + e.StackTrace);
      }
      Console.WriteLine("Press ENTER to continue...");
      Console.ReadLine();
   }

   private void querySample()
   {
      String soqlQuery = "SELECT FirstName, LastName FROM Contact";
      try
      {
         QueryResult qr = binding.query(soqlQuery);
         bool done = false;

         if (qr.size > 0)
         {
            Console.WriteLine("Logged-in user can see "
                  + qr.records.Length + " contact records.");

            while (!done)
            {
               Console.WriteLine("");
               sObject[] records = qr.records;
               for (int i = 0; i < records.Length; i++)
               {
                  Contact con = (Contact)records[i];
                  string fName = con.FirstName;
                  string lName = con.LastName;
```

```
                    if (fName == null)
                       Console.WriteLine("Contact " + (i + 1) + ": " + lName);
                    else
                       Console.WriteLine("Contact " + (i + 1) + ": " + fName
                              + " " + lName);
                 }

                 if (qr.done)
                 {
                    done = true;
                 }
                 else
                 {
                    qr = binding.queryMore(qr.queryLocator);
                 }
              }
           }
           else
           {
              Console.WriteLine("No records found.");
           }
        }
        catch (Exception ex)
        {
           Console.WriteLine("\nFailed to execute query succesfully," +
               "error message was: \n{0}", ex.Message);
        }
        Console.WriteLine("\nPress ENTER to continue...");
        Console.ReadLine();
     }
   }
}
```

The following C# example is the same as the previous C# example, except it uses .NET 3.0 SoapClient services instead of .NET 2.0 SforceService services.

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

using System.ServiceModel;
using Walkthrough.sforce;

namespace Walkthrough
{
    class QuickstartApiSample
    {
        private static SoapClient loginClient; // for login endpoint
        private static SoapClient client; // for API endpoint
        private static SessionHeader header;
        private static EndpointAddress endpoint;

        static void Main(string[] args)
```

```
        {
            QuickstartApiSample sample = new QuickstartApiSample();
            sample.run();
        }

        public void run()
        {
            // Make a login call
            if (login())
            {
                // Do a describe global
                describeGlobalSample();

                // Describe an account object
                describeSObjectsSample();

                // Retrieve some data using a query
                querySample();

                // Log out
                logout();
            }
        }

        private bool login()
        {
            Console.Write("Enter username: ");
            string username = Console.ReadLine();
            Console.Write("Enter password: ");
            string password = Console.ReadLine();

            // Create a SoapClient specifically for logging in
            loginClient = new SoapClient();

            // (combine pw and token if necessary)
            LoginResult lr;
            try
            {
                Console.WriteLine("\nLogging in...\n");
                lr = loginClient.login(null, username, password);
            }
            catch (Exception e)
            {
                // Write the fault message to the console
                Console.WriteLine("An unexpected error has occurred: " + e.Message);

                // Write the stack trace to the console
                Console.WriteLine(e.StackTrace);
                return false;
            }

            // Check if the password has expired
            if (lr.passwordExpired)
            {
```

```
            Console.WriteLine("An error has occurred. Your password has expired.");
            return false;
        }

        /** Once the client application has logged in successfully, it will use
         * the results of the login call to reset the endpoint of the service
         * to the virtual server instance that is servicing your organization
         */

        // On successful login, cache session info and API endpoint info
        endpoint = new EndpointAddress(lr.serverUrl);

        /** The sample client application now has a cached EndpointAddress
        * that is pointing to the correct endpoint. Next, the sample client
        * application sets a persistent SOAP header that contains the
        * valid sessionId for our login credentials. To do this, the sample
        * client application creates a new SessionHeader object. Add the session
        * ID returned from the login to the session header
        */
        header = new SessionHeader();
        header.sessionId = lr.sessionId;

        // Create and cache an API endpoint client
        client = new SoapClient("Soap", endpoint);

        printUserInfo(lr, lr.serverUrl);

        // Return true to indicate that we are logged in, pointed
        // at the right URL and have our security token in place.
        return true;
    }

    private void printUserInfo(LoginResult lr, String authEP)
    {
        try
        {
            GetUserInfoResult userInfo = lr.userInfo;

            Console.WriteLine("\nLogging in ...\n");
            Console.WriteLine("UserID: " + userInfo.userId);
            Console.WriteLine("User Full Name: " +
                userInfo.userFullName);
            Console.WriteLine("User Email: " +
                userInfo.userEmail);
            Console.WriteLine();
            Console.WriteLine("SessionID: " +
                lr.sessionId);
            Console.WriteLine("Auth End Point: " +
                authEP);
            Console.WriteLine("Service End Point: " +
                lr.serverUrl);
            Console.WriteLine();
        }
        catch (Exception e)
```

```
        {
            Console.WriteLine("An unexpected error has occurred: " + e.Message +
                " Stack trace: " + e.StackTrace);
        }
    }

    private void logout()
    {
        try
        {
            client.logout(header);
            Console.WriteLine("Logged out.");
        }
        catch (Exception e)
        {
            // Write the fault message to the console
            Console.WriteLine("An unexpected error has occurred: " + e.Message);

            // Write the stack trace to the console
            Console.WriteLine(e.StackTrace);
        }
    }

    /**
    * To determine the objects that are available to the logged-in
    * user, the sample client application executes a describeGlobal
    * call, which returns all of the objects that are visible to
    * the logged-in user. This call should not be made more than
    * once per session, as the data returned from the call likely
    * does not change frequently. The DescribeGlobalResult is
    * simply echoed to the console.
    */
    private void describeGlobalSample()
    {
        try
        {
            // describeGlobal() returns an array of object results that
            // includes the object names that are available to the logged-in user.
            DescribeGlobalResult dgr = client.describeGlobal(
                      header, // session header
                      null // package version header
                      );

            Console.WriteLine("\nDescribe Global Results:\n");
            // Loop through the array echoing the object names to the console

            for (int i = 0; i < dgr.sobjects.Length; i++)
            {
                Console.WriteLine(dgr.sobjects[i].name);
            }
        }
        catch (Exception e)
        {
            Console.WriteLine("An exception has occurred: " + e.Message +
```

```
                "\nStack trace: " + e.StackTrace);
        }
    }

    /**
    * The following method illustrates the type of metadata
    * information that can be obtained for each object available
    * to the user. The sample client application executes a
    * describeSObject call on a given object and then echoes
    * the returned metadata information to the console. Object
    * metadata information includes permissions, field types
    * and length and available values for picklist fields
    * and types for referenceTo fields.
    */
    private void describeSObjectsSample()
    {
        Console.Write("\nType the name of the object to " +
             "describe (try Account): ");
        string objectType = Console.ReadLine();
        try
        {

            // Call describeSObjects() passing in an array with one object type name

            DescribeSObjectResult[] dsrArray =
                  client.describeSObjects(
                    header, // session header
                    null, // package version header
                    null, // locale options
                    new string[] { objectType } // object name array
                    );

            // Since we described only one sObject, we should have only
            // one element in the DescribeSObjectResult array.
            DescribeSObjectResult dsr = dsrArray[0];

            // First, get some object properties
            Console.WriteLine("\n\nObject Name: " + dsr.name);

            if (dsr.custom) Console.WriteLine("Custom Object");
            if (dsr.label != null) Console.WriteLine("Label: " + dsr.label);

            // Get the permissions on the object
            if (dsr.createable) Console.WriteLine("Createable");
            if (dsr.deletable) Console.WriteLine("Deleteable");
            if (dsr.queryable) Console.WriteLine("Queryable");
            if (dsr.replicateable) Console.WriteLine("Replicateable");
            if (dsr.retrieveable) Console.WriteLine("Retrieveable");
            if (dsr.searchable) Console.WriteLine("Searchable");
            if (dsr.undeletable) Console.WriteLine("Undeleteable");
            if (dsr.updateable) Console.WriteLine("Updateable");

            Console.WriteLine("Number of fields: " + dsr.fields.Length);
```

```
// Now, retrieve metadata for each field
for (int i = 0; i < dsr.fields.Length; i++)
{
    // Get the field
    Field field = dsr.fields[i];

    // Write some field properties
    Console.WriteLine("Field name: " + field.name);
    Console.WriteLine("\tField Label: " + field.label);

    // This next property indicates that this
    // field is searched when using
    // the name search group in SOSL
    if (field.nameField)
        Console.WriteLine("\tThis is a name field.");

    if (field.restrictedPicklist)
        Console.WriteLine("This is a RESTRICTED picklist field.");

    Console.WriteLine("\tType is: " + field.type.ToString());

    if (field.length > 0)
        Console.WriteLine("\tLength: " + field.length);

    if (field.scale > 0)
        Console.WriteLine("\tScale: " + field.scale);

    if (field.precision > 0)
        Console.WriteLine("\tPrecision: " + field.precision);

    if (field.digits > 0)
        Console.WriteLine("\tDigits: " + field.digits);

    if (field.custom)
        Console.WriteLine("\tThis is a custom field.");

    // Write the permissions of this field
    if (field.nillable) Console.WriteLine("\tCan be nulled.");
    if (field.createable) Console.WriteLine("\tCreateable");
    if (field.filterable) Console.WriteLine("\tFilterable");
    if (field.updateable) Console.WriteLine("\tUpdateable");

    // If this is a picklist field, show the picklist values
    if (field.type.Equals(fieldType.picklist))
    {
        Console.WriteLine("\tPicklist Values");
        for (int j = 0; j < field.picklistValues.Length; j++)
            Console.WriteLine("\t\t" + field.picklistValues[j].value);
    }

    // If this is a foreign key field (reference),
    // show the values
    if (field.type.Equals(fieldType.reference))
    {
```

```
                    Console.WriteLine("\tCan reference these objects:");
                    for (int j = 0; j < field.referenceTo.Length; j++)
                        Console.WriteLine("\t\t" + field.referenceTo[j]);
                }
                Console.WriteLine("");
            }
        }
        catch (Exception e)
        {
            Console.WriteLine("An exception has occurred: " + e.Message +
                "\nStack trace: " + e.StackTrace);
        }
        Console.WriteLine("Press ENTER to continue...");
        Console.ReadLine();
    }

    private void querySample()
    {
        String soqlQuery = "SELECT FirstName, LastName FROM Contact";
        try
        {
            QueryResult qr = client.query(
                header, // session header
                null, // query options
                null, // mru options
                null, // package version header
                soqlQuery // query string
                );

            bool done = false;

            if (qr.size > 0)
            {
                Console.WriteLine("Logged-in user can see "
                    + qr.records.Length + " contact records.");

                while (!done)
                {
                    Console.WriteLine("");
                    sObject[] records = qr.records;
                    for (int i = 0; i < records.Length; i++)
                    {
                        Contact con = (Contact)records[i];
                        string fName = con.FirstName;
                        string lName = con.LastName;
                        if (fName == null)
                            Console.WriteLine("Contact " + (i + 1) + ": " + lName);
                        else
                            Console.WriteLine("Contact " + (i + 1) + ": " + fName
                               + " " + lName);
                    }

                    if (qr.done)
                    {
```

```
                            done = true;
                        }
                        else
                        {
                            qr = client.queryMore(
                                    header, // session header
                                    null, // query options
                                    qr.queryLocator // query locator
                                    );
                        }
                    }
                }
                else
                {
                   Console.WriteLine("No records found.");
                }
            }
            catch (Exception ex)
            {
                Console.WriteLine("\nFailed to execute query succesfully," +
                    "error message was: \n{0}", ex.Message);
            }
            Console.WriteLine("\nPress ENTER to continue...");
            Console.ReadLine();
        }
    }
}
```

CHAPTER 2 Object Basics

In this chapter ...

Generally speaking, API objects represent database tables that contain your organization's information. For example, the central object in the Salesforce data model represents accounts—companies and organizations involved with your business, such as customers, partners, and competitors.

The term "record" describes a particular occurrence of an object (such as a specific account like "IBM" or "United Airlines" that is represented by an Account object). A record is analogous to a row in a database table.

Objects already created for you by Salesforce are called standard objects. Objects you create in your organization are called custom objects. Objects you create that map to data stored outside your organization are called external objects.

While this document describes all of the objects available in the API, your applications work with only the objects that you are authorized to access. Programmatic access to objects is determined by the objects defined in your organization, your organization configuration, your user permissions and access settings (which are configured by your organization's system administrator), your data sharing model, and other factors related specifically to the object.

Most of the objects accessible through the API are read-write objects. However, there are a few objects that are read-only. This fact is noted in the description for the object.

For details about the data types and size restrictions for each object's fields, see the *Salesforce Field Reference Guide*.

Primitive Data Types

The API uses the following primitive data types:

Value	Details
base64	Base 64-encoded binary data. Fields of this type are used for storing binary files in Attachment records, Document records, and Scontrol records. In these objects, the `Body` or `Binary` field contains the (base64 encoded) data, while the `BodyLength` field defines the length of the data in the `Body` or `Binary` field. In the Document object, you can specify a URL to the document instead of storing the document directly in the record.
boolean	Boolean fields have one of these values: `true` (or 1), or `false` (or 0).
byte	A set of bits.
date	Date data. Fields of this type contain date values, such as `ActivityDate` in the Event object. Unlike dateTime fields, date fields contain no time value—the time portion of a date field is not relevant and is always set to midnight in the Coordinated Universal Time (UTC) time zone. If you specify a date value in a query, you can filter on date fields only.
dateTime	Date/time values (timestamps). Fields of this type handle date/time values (timestamps), such as `ActivityDateTime` in the Event object or the `CreatedDate`, `LastModifiedDate`, or `SystemModstamp` in many objects. Regular dateTime fields are full timestamps with a precision of one second. They are always transferred in the Coordinated Universal Time (UTC) time zone. In your client application, you might need to translate the timestamp to or from a local time zone. If you specify a dateTime value in a query, you can filter on dateTime fields only. Development tools differ in the way that they handle time data. Some development tools report the local time, while others report only the Coordinated Universal Time (UTC) time zone. To determine how your development tool handles time values, refer to its documentation. Note: The Event object has a `DurationInMinutes` field that specifies the number of minutes for an event. Even though this is a temporal value, it is an integer type—not a dateTime type.
double	Double values. Fields of this type can contain fractional portions (digits to the right of the decimal place), such as `ConversionRate` in CurrencyType. In the API, all non-integer values (such as Currency Field Type and Percent Field Type) contain values of type double. Some restrictions may be applied to double values: • `scale`: Maximum number of digits to the right of the decimal place. • `precision`: Total number of digits, including those to the left and the right of the decimal place The maximum number of digits to the left of the decimal place is equal to `precision` minus `scale`. In the online application, precision is defined differently—it is the maximum number of digits allowed to the left of the decimal place. Values can be stored in scientific notation if the number is large enough (or, for negative numbers, small enough), as indicated by the W3C XML Schema Part 2: Datatypes Second Edition specification. Warning: When the user sets the precision in custom fields in the Salesforce application, it displays the precision set by the user, even if the user enters a more precise value than defined for those

Value	Details
	fields. However, when you set the precision in custom fields using the API, no rounding occurs when the user retrieves the number field.
int	Fields of this type contain numbers with no fractional portion (digits to the right of a decimal place), such as the `NumberOfEmployees` in an Account. For integer fields, `digits` specifies the maximum number of digits that an int can have.
long	Large integers. They are similar to the int type but can hold a wider range of numbers. The smallest possible value for long is -9223372036854775808 and the largest possible value is 9223372036854775807. For long fields, `digits` specifies the maximum number of digits that the number can have.
string	Character strings. Fields that are of data type `string` contain text and some have length restrictions depending on the data being stored. For example, in the Contact object, the `FirstName` field is 40 characters, the `LastName` field is 80 characters, the `MailingStreet` is 255 characters. Note: For fields that contain strings, behavior is different beginning with API version 15.0. In API versions previous to 15.0, if you specify a value for a field, and that value is too large, the value is truncated. For API version 15.0 and later, if a value is specified that is too large, the operation fails and the fault code `STRING_TOO_LONG` is returned. AllowFieldTruncationHeader allows you to specify that the previous behavior, truncation, be used instead of the new behavior in API versions 15.0 and later. This header has no effect in versions 14.0 and earlier. The affected fields are: anyType, email, encryptedstring, multipicklist, phone, picklist, string, and textarea.
time	Time values. Fields of this type handle time values, such as `FridayEndTime` in the BusinessHours object, with a precision of one millisecond. Development tools differ in the way that they handle time data. Some development tools report the local time, while others report only the Coordinated Universal Time (UTC) time zone. To determine how your development tool handles time values, refer to its documentation.

These data types are used in the SOAP messages that are exchanged between your client application and the API. When writing your client application, follow the data typing rules defined for your programming language and development environment. Your development tool handles the mapping of typed data in your programming language with these SOAP data types.

The primitive data types are:

- specified in the World Wide Web Consortium's publication *XML Schema Part 2: Data Types* at the following URL: `http://www.w3.org/TR/xmlschema-2/`.
- enumerated in the `SOAPType` field of the Field type, which is described in the `fields` property of the DescribeSObjectResult.

Primitive types are used as a standardized way to define, send, receive, and interpret basic data types in the SOAP messages exchanged between client applications and the API. In addition, primitive data types are interpreted in a Salesforce-specific way, which is useful for display formatting and for numeric conversion (adding values of different currencies).

For example, Salesforce chooses to interpret a double value passed via SOAP as a `double` in a number of possible ways, depending on the field definition. If the field type for that data is currency, Salesforce handles the display of the data by prepending it with a currency symbol and inserting a decimal for precision. Similarly, if the field type is percent, Salesforce handles the display of the data by appending a percent sign (%). Regardless of the field type, however, the value is sent in the SOAP message as a double.

The API uses data types called field types that are defined in the WSDLs. For more information, see Field Types.

Field Types

In addition to the primitive data types, the API defines the following data types for fields:

Note: For fields that contain strings, behavior is different beginning with API version 15.0. In API versions previous to 15.0, if you specify a value for a field, and that value is too large, the value is truncated. For API version 15.0 and later, if a value is specified that is too large, the operation fails and the fault code `STRING_TOO_LONG` is returned. AllowFieldTruncationHeader allows you to specify that the previous behavior, truncation, be used instead of the new behavior in API versions 15.0 and later. This header has no effect in versions 14.0 and earlier. The affected fields are: anyType, email, encryptedstring, multipicklist, phone, picklist, string, and textarea.

Field Type	What the Field Contains
address	A compound data type that contains address field data. See Address Compound Fields.
anyType	Polymorphic data type that returns string, picklist, reference, Boolean, currency, int, double, percent, ID, date, datetime, url, or email data depending on the kind of field involved. See AnyType Field Type.
calculated	Fields that are defined by a formula. See Calculated Field Type.
combobox	A combobox, which includes a set of enumerated values and allows the user to specify a value not in the list. See ComboBox Field Type.
currency	Currency values. See Currency Field Type.
DataCategoryGroupReference	Reference to a data category group or a category unique name. See DataCategoryGroupReference Field Type.
email	Email addresses. See Email Field Type.
encryptedstring	Encrypted text fields contain any combination of letters, numbers, or symbols that are stored in encrypted form. You can set a maximum length of up to 175 characters. Available in API versions 11.0 and later.
ID	Primary key field for the object. See ID Field Type. Note: Most Web services tools, including .NET and WSC, map the ID simple type defined in the API WSDL (Enterprise or Partner) to a string. However, other tools generate a specific ID class to represent the ID simple type. Consult your Web services toolkit documentation for more information.
JunctionIdList	A string array of referenced ID values that represent the many-to-many relationship of an underlying junction entity. Query and manipulate the string array to query and manipulate the underlying junction entities in a single API call. See: JunctionIdList Field Type Warning: Adding a `JunctionIdList` field name to the `fieldsToNull` property deletes all related junction records. This action can't be undone.
location	A compound data type that contains latitude and longitude values for geolocation fields. See Geolocation Compound Field.
masterrecord	When records are merged, the ID of the record that is saved (the other records are deleted).

Field Type	What the Field Contains
multipicklist	Multi-select picklists, which include a set of enumerated values from which multiple values can be selected. See Multi-Select Picklist Field Type.
percent	Percentage values. See Percent Field Type.
phone	Phone numbers. Values can include alphabetic characters. Client applications are responsible for phone number formatting. See Phone Field Type.
picklist	Picklists, which include a set of enumerated values from which one value can be selected. See Picklist Field Type.
reference	Cross-references to a different object. Analogous to a foreign key field in SQL. See Reference Field Type.
textarea	String that is displayed as a multiline text field. See Textarea Field Type.
url	URL values. Client applications commonly display URLs as hyperlinks. See URL Field Type.

These field types extend primitive data types. Many of these field types follow common data typing conventions that are made explicit in their metadata. However, certain field types have unique characteristics that you must understand before using them in your client application.

These field types apply to both standard and custom fields. They are enumerated in the `type` field of the Field type, which is described in the `fields` property of the DescribeSObjectResult.

Note: Some numeric fields have precision and scale limits. In addition, certain text fields have length restrictions. These restrictions are enforced when you `create()` or `update()` objects. However, the API can return data that does not meet these restrictions.

AnyType Field Type

The `anyType` field type is dynamic and returns `string`, `date`, `number`, or `boolean` data depending on the kind of field involved. For example, the element in a SOAP message has an `xsi:type="xsd:string"` attribute if the field is of type `string`. This field type is used in history objects for the `NewValue` and `OldValue` fields. It is also a valid field type for `fieldType` and `soapType`.

Note: Most SOAP toolkits automatically deserialize this element into the correct native type.

Calculated Field Type

Calculated fields are read-only fields in the API. These fields are defined by a formula, which is an algorithm that derives its value from other fields, expressions, or values. You can filter on these fields in SOQL, but you don't replicate these fields. The length of text calculated fields is 3900 characters or less—anything longer is truncated.

Calculated fields are called formula fields in the Salesforce user interface.

ComboBox Field Type

A combobox is a picklist that also allows users to type a value that is not already specified in the list. A combobox is defined as a string value.

Currency Field Type

Currency fields contain currency values, such as the `ExpectedRevenue` field in a Campaign, and are defined as type double.

For organizations that have the multicurrency option enabled, the `CurrencyIsoCode` field is defined for any object that can have currency fields. The `CurrencyIsoCode` field and currency fields are linked in a special way. On any specific record, the `CurrencyIsoCode` field defines the currency of that record. Therefore, the values of all currency fields on that record are expressed in that currency.

For most cases, clients do not need to consider the linking of the `CurrencyIsoCode` field and the currency fields on an object. However, consider the following:

- The `CurrencyIsoCode` field exists only for those organizations that have enabled multicurrency support.
- When displaying the currency values in a user interface, it is preferred to prepend each currency value with its `CurrencyIsoCode` value and a space separator.
- The `CurrencyIsoCode` field is a restricted picklist field. The set of allowable values, defined in the CurrencyType object, can vary from organization to organization. Attempting to set it to a value that is not defined for an organization causes the operation to be rejected.
- If you update the `CurrencyIsoCode` field on an object, it implicitly converts all currency values on that object to the new currency code The field uses the conversion rates that are defined for that organization in the Salesforce user interface. If you specify currency values in that same `update()` call, the new currency values you specify are interpreted in the new `CurrencyIsoCode` field value, without conversion.
- The picklist values in a `CurrencyIsoCode` field do not exactly match the labels displayed in Salesforce.

To perform currency conversions, client applications can look up the `CurrencyIsoCode` in the CurrencyType object.

DataCategoryGroupReference Field Type

A data category group has categories that classify articles in Salesforce Knowledge and questions in the Answers feature. Every article and question object has two fields of type DataCategoryGroupReference which contain the category group and category unique name. You can use the `describeDataCategoryGroups()` and `describeDataCategoryGroupStructures()` calls to retrieve the category groups and categories associated to these objects.

Email Field Type

Email fields contain email addresses. Client applications are responsible for specifying valid and properly formatted email addresses in `create()` and `update()` calls.

ID Field Type

With rare exceptions, all objects in the API have a field of type ID. The field is named `Id` and contains a unique identifier for each record in the object. It is analogous to a primary key in relational databases. When you `create()` a new record, the Web service generates an ID value for the record, ensuring that it is unique within your organization's data. You cannot use the `update()` call on ID fields. Because the ID value stays constant over the lifetime of the record, you can refer to the record by its ID value in subsequent API calls. Also, the ID value contains a three-character code that identifies the object type, which client applications can retrieve via the `describeSObjects()` call.

In addition, certain objects, including custom objects, have one or more fields of type `reference` that contain the ID value for a related record. These fields have names that end in the suffix "Id", for example, `OwnerId` in the account object. `OwnerId` contains the ID of the user who owns that object. Unlike the field named `Id`, `reference` fields are analogous to foreign keys and can be changed via the `update()` call. For more information, see Reference Field Type.

Some API calls, such as `retrieve()` and `delete()`, accept an array of IDs as parameters—each array element uniquely identifies the row to retrieve or delete. Similarly, the `update()` call accepts an array of sObject records—each sObject contains an `Id` field that uniquely identifies the sObject.

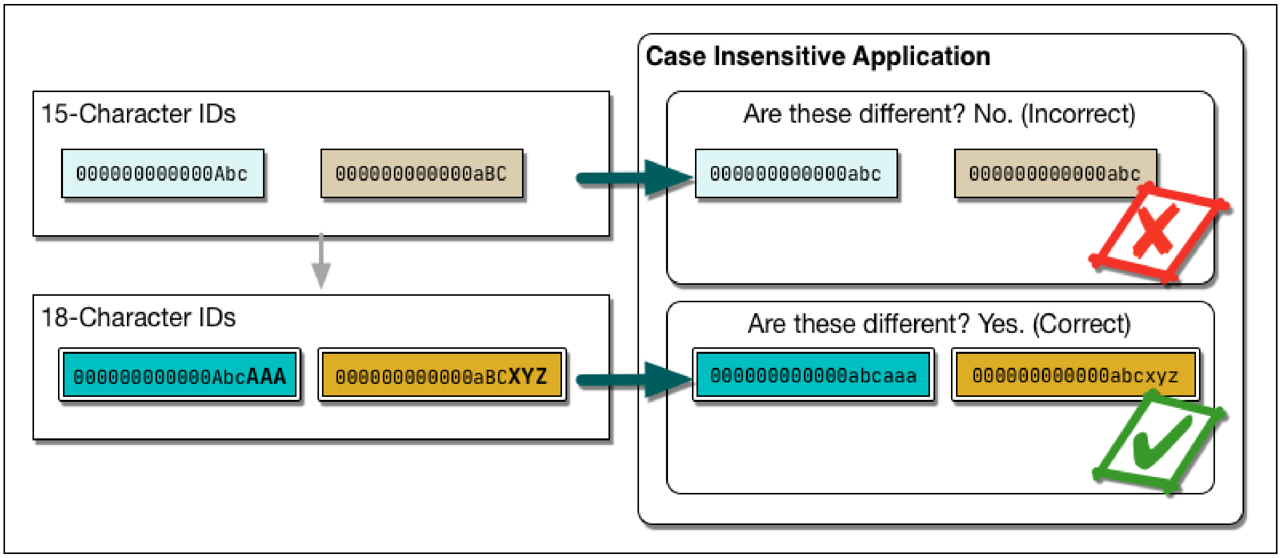
Note: Most Web services tools, including .NET and WSC, map the ID simple type defined in the API WSDL (Enterprise or Partner) to a string. However, other tools generate a specific ID class to represent the ID simple type. Consult your web services toolkit documentation for more information.

15-Character and 18-Character IDs, and Case Sensitivity

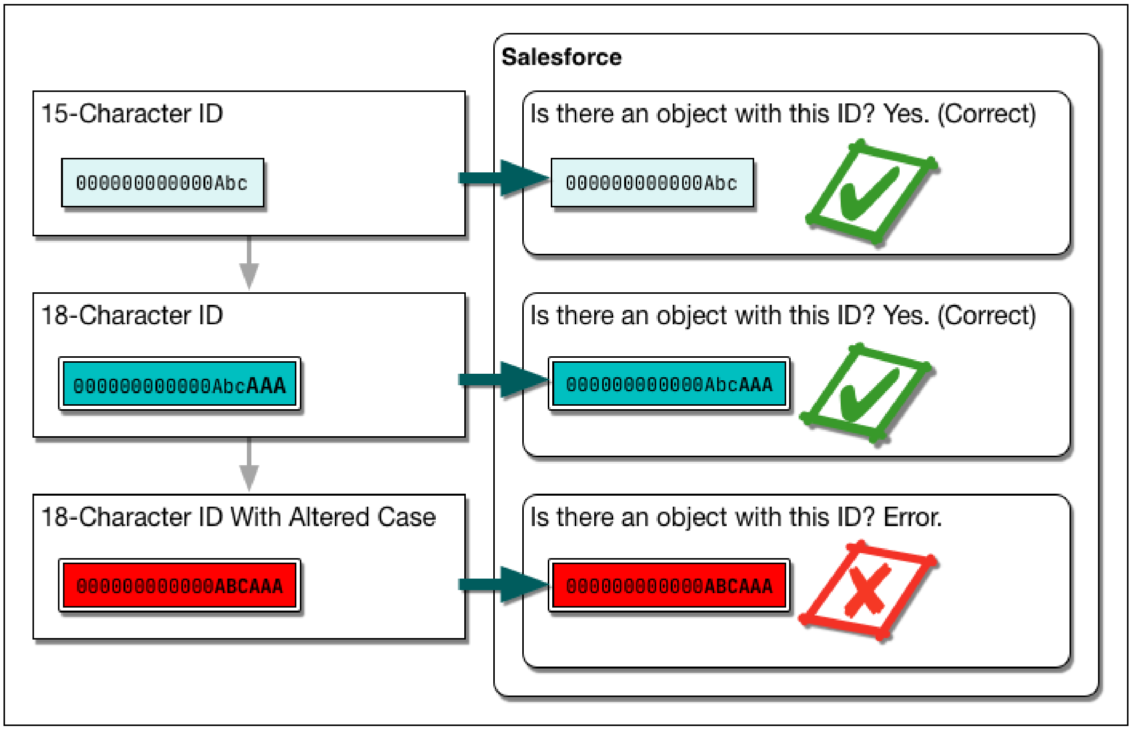
Salesforce IDs are often represented by 15-character, base-62, strings. Each of the 15 characters can be a numeric digit (0-9), a lowercase letter (a-z), or an uppercase letter (A-Z). These 15-character IDs are *case-sensitive*. To Salesforce, `000000000000Abc` is not the same as `000000000000aBC`.

Don't use 15-character IDs in case-insensitive applications like Microsoft Access™. These applications incorrectly consider `000000000000Abc` to be the same as `000000000000aBC`.

To avoid these issues, all API calls return 18-character IDs that are *case-safe*, meaning that they will be compared correctly by case-insensitive applications. The extra 3 characters at the end of the ID encode the case of the preceding 15 characters. Use 18-character IDs in all API calls when creating, editing, or deleting data.



Note: 18-character IDs are *case-safe*, but not *case-insensitive*. In other words, if you manually change the case of an 18-character ID, Salesforce detects that the three extra characters do not match the case of the preceding characters and returns an error.



To convert the 18-character ID to a 15-character version, you may truncate the last three characters. However, Salesforce recommends that you use the 18-character ID.

JunctionIdList Field Type

Starting in API version 34.0, the `JunctionIdList` field type lets you manipulate the many-to-many relationship of an entity directly. You no longer need to manipulate underlying junction entity records. `JunctionIdList` fields can be queried and updated like any other field on the entity. Queries or updates to `JunctionIdList` fields act as queries or updates to the underlying junction entity records. Fields of type `JunctionIdList` appear in the WSDL as an unbounded array of type ID.

Query JunctionIdList fields just like any other field. Here's an example of a SOQL query that includes the `TaskWhoIds` JunctionIdList field.

```
SELECT Id, Subject, TaskWhoIds
FROM Task
WHERE LastModifiedDate > LAST_WEEK
```

Note: The total number of records you can query for in a single SOQL query, when one of the fields being queried on is of type JunctionIdList, can't exceed 500. If the number of records returned exceeds 500, EXCEPTION: System.UnexpectedException: Truncated appears.

The restriction is <total number of entity records> * <total number of records in the entity's JunctionIdList field> <= 500.

For example, you query on the EventWhoIds JunctionIdList field for a list of events. There are 101 events and for each event, there are 5 records in the EventWhoIds JunctionIdList. Therefore, the SOQL query would be querying for 505 records in total, which is over the 500 limit, and you get an exception.

Multi-Select Picklist Field Type

Multi-select picklist fields contain a list of one or more items from which a user can choose multiple items. One of the items can be configured as the default item. Selections are maintained as a string containing a series of attributes delimited by semicolons. For example, a query can return the values of a multivalue picklist as "first value; second value; third value". For information on querying multi-select picklists, see Querying Multi-Select Picklists in the *Salesforce SOQL and SOSL Reference Guide*.

Percent Field Type

Percent fields contain percent values. Percent fields are defined as type double.

Phone Field Type

Phone fields contain phone numbers, which can include alphabetic characters. Client applications are responsible for phone number formatting.

Picklist Field Type

Picklist fields contain a list of one or more items from which a user chooses a single item. They display as dropdown lists in the Salesforce user interface. One of the items can be configured as the default item.

In the Field object associated with the DescribeSObjectResult, the `restrictedPicklist` field defines whether the field is a restricted picklist or not. The API does not enforce the list of values for advisory (unrestricted) picklist fields on `create()` or `update()`. When inserting an unrestricted picklist field that does not have a PicklistEntry, the system creates an "inactive" picklist value. This value can be promoted to an "active" picklist value by adding the picklist value in the Salesforce user interface.

When creating new, inactive picklists, the API checks to see if there is a match. This check is case-insensitive.

In theField object associated with the DescribeSObjectResult, the `picklistValues` field contains an array of items (PicklistEntry objects). Each PicklistEntry defines the item's label, value, and whether it is the default item in the picklist (a picklist has no more than one default value).

Enumerated fields support localization of the labels to the language of the user. For example, for the `Industry` field on an Account, the value "Agriculture" can be translated to various languages. The enumerated field values are fixed and do not change with a user's language. However, each value may have a specified "label" field that provides the localized label for that value. Always use the value when inserting or updating a field. The `query()` call always returns the value, not the label. Use the corresponding label for a value in the describeSObjectResult when displaying the value to the user in any user interface.

The API supports the retrieval of the certain picklists in the following objects: CaseStatus, ContractStatus, LeadStatus, OpportunityStage, PartnerRole, SolutionStatus, TaskPriority, and TaskStatus. Each object represents a value in the respective picklist. These picklist entries always specify some other piece of information, such as whether the status is converted. Your client application can invoke the `query()` call on any of these objects (such as CaseStatus) to retrieve the set of values in the picklist. The application can then use that information while processing other objects (such as Case objects) to find more information about those objects (such as a given case). These objects are read-only via the API. To modify items in picklists, you must use the Salesforce user interface.

Reference Field Type

A reference field contains an `Id` value that points to a unique record (usually the parent record) on another object. A reference field is analogous to the concept of a foreign key in relational databases. The name of a reference field ends, by convention, with the letters `Id` (such as `CaseId` or `OpportunityId`). For example, in the OpportunityCompetitor object, the `OpportunityId` field is a reference field that points to the Opportunity object. It contains an ID value that uniquely identifies an Opportunity record.

Sometimes, an object can refer to another object of its same type. For example, an Account can have a parent link that points to another Account.

The Event and Task objects both have `WhoId` and `WhatId` cross-reference ID fields. Each of these cross-reference fields can point to one of several other objects. The `WhoId` field can point to a Contact or Lead, and the `WhatId` field can point to an Account, Opportunity, Campaign, or Case. In addition, if the `WhoId` field refers to a Lead, then the `WhatId` field must be empty.

You can describe and query each cross-referenced object. When you query a cross-reference ID field, it returns an object ID of the appropriate type. You can then query that ID to get additional information about the object, using the ID in the `id` field for that query.

The cross-reference ID field value is either:

- a valid record in your organization, or
- an empty value, which indicates an empty reference

The cross-reference ID field value, if non-`null`, is guaranteed to be an object in your organization. However, it is not guaranteed that you can query that object. Users with the "View All Data" permission can always query that object. Other users can be restricted from viewing or editing the referenced object.

When specifying a value for a cross-reference ID field in a `create()` or `update()` call, the value must be a valid value of type ID, and the user must have appropriate access to that object. The exact requirements vary from field to field.

Textarea Field Type

Textarea fields contain text that can be longer than 4000 bytes. Unlike string fields, textarea fields cannot be specified in the WHERE clause of a queryString of a `query()` call. To filter records on this field, you must do so while processing records in the QueryResult. For fields with this restriction, its `filterable` field in the Field type (described in the `fields` property of the DescribeSObjectResult) is `false`.

URL Field Type

URL fields contain URLs. Client applications are responsible for specifying valid and properly formatted URLs in `create()` and `update()` calls.

Compound Fields

Compound fields group together multiple elements of primitive data types, such as numbers or strings, to represent complex data types, such as a location or an address. Compound fields are an abstraction that can simplify application code that handles the values, leading to more concise, understandable code.

Address compound fields are available in the SOAP and REST APIs in API version 30.0 and later. Geolocation fields are available in the SOAP and REST APIs in API version 26.0 and later, with some limitations on SOAP for API versions below 30.0.

Compound fields are accessible as a single, structured field, or as individual component fields. The values contained within the compound field and the values in individual fields both map to the same underlying data stored in Salesforce; they always have identical values. Code that references individual component fields is unaffected by the new compound fields.

Compound fields are read-only. Changes are performed by writing to the individual component fields. This maintains a single, consistent method for performing updates, and avoids the possibility of conflicts. For example, if both the `BillingAddress` compound field and `BillingCity` individual component field were updated in the same API call, it would be unclear which value should be saved.

Compound fields are available only through the SOAP and REST APIs. Compound fields are described in both the Enterprise and Partner WSDLs. Update your WSDL to at least API 30.0 to access the new compound data types.

Address Compound Fields

Standard addresses—addresses built into standard objects in Salesforce—are accessible in the SOAP and REST APIs as an `Address`, a structured compound data type, as well as individual address elements.

The `Address` type extends the `Location` type, the data type used for compound geolocation fields. Using API 30.0 and later, standard addresses are available in the SOAP and REST APIs as a compound field of type `Address`, a structured data type that combines the following fields.

Field	Type	Description
`Accuracy`	picklist	Accuracy level of the geocode for the address. For example, this field is known as `MailingGeocodeAccuracy` on Contact.
`City`	string	The city detail for the address. For example, this field is known as `MailingCity` on Contact.
`Country`	string	The country detail for the address. For example, this field is known as `MailingCountry` on Contact.
`CountryCode`	picklist	The ISO country code for the address. For example, this field is known as `MailingCountryCode` on Contact. `CountryCode` is always available on compound address fields, whether or not state and country picklists are enabled in your organization.
`Latitude`	double	Used with `Longitude` to specify the precise geolocation of the address. For example, this field is known as `MailingLatitude` on Contact.
`Longitude`	double	Used with `Latitude` to specify the precise geolocation of the address. For example, this field is known as `MailingLongitude` on Contact.
`PostalCode`	string	The postal code for the address. For example, this field is known as `MailingPostalCode` on Contact.
`State`	string	The state detail for the address. For example, this field is known as `MailingState` on Contact.
`StateCode`	picklist	The ISO state code for the address. For example, this field is known as `MailingStateCode` on Contact. `StateCode` is always available on compound address fields, whether or not state and country picklists are enabled in your organization.
`Street`	textarea	The street detail for the address. For example, this field is known as `MailingStreet` on Contact.

Address fields are provided on many standard objects, such as Account, Contact, Quote, and User. Some objects provide fields for multiple addresses. For example, Account provides for four different addresses. In this case, address field names are prefixed with the type of address, for example, `BillingAddress`, `ShippingAddress`, and so on.

Note: Standard address compound fields are read-only, and are only accessible using the SOAP and REST APIs. See Compound Field Considerations and Limitations on page 43 for additional details of the restrictions this imposes.

When an address is geocoded, its latitude and longitude fields are populated with coordinates. A related geolocation field is also populated. Typically, geocoding service providers geocode addresses, and rate the accuracy of the geocodes.

The accuracy subfield `GeocodeAccuracy` stores the accuracy data for a geocoded location. External geolocation apps can get the accuracy level of a geocoded address via the API. When you retrieve an address via the API, any accuracy data is included. You can also retrieve the accuracy information by itself, if needed.

Like its parent, the compound `Address` field, the `GeocodeAccuracy` field is only available for standard address fields on standard objects.

Retrieving Compound Address Fields

Using compound fields can simplify code that works with addresses, especially for SOQL queries. SOQL `SELECT` clauses can reference addresses directly, instead of all of the individual component fields.

```
SELECT Name, BillingAddress
FROM Account
```

To write code that's compatible with API versions before 30.0, as well as API 30.0 and above, use the individual fields:

```
SELECT Name, BillingStreet, BillingCity, BillingState, BillingPostalCode,
       BillingCountry, BillingLatitude, BillingLongitude
FROM Account
```

Compound address field values are returned as a structured data type, `Address`. Code that works with compound address fields needs to reference the individual components of the returned value. See the code sample below.

Example: **Retrieve a Standard Address Compound Field with the SOAP API**

The following Java method uses the Salesforce SOAP API to retrieve and display the Mailing Address for a list of contacts.

```
// Modified version of code in the SOAP API QuickStart
private void querySample() {
    String soqlQuery = "SELECT FirstName, LastName, MailingAddress FROM Contact";
    try {
        QueryResult qr = connection.query(soqlQuery);
        boolean done = false;

        if (qr.getSize() > 0) {
            System.out.println("\nLogged-in user can see "
              + qr.getRecords().length + " contact records.");

            while (!done) {
                System.out.println("");
                SObject[] records = qr.getRecords();
                for (int i = 0; i < records.length; ++i) {
                    Contact con = (Contact) records[i];
                    String fName = con.getFirstName();
                    String lName = con.getLastName();

                    // Access the compound address field MailingAddress
                    Address addr = (Address) con.getMailingAddress();
                    String streetAddr = "";
                    if (null != addr) streetAddr = addr.getStreet();

                    if (fName == null) {
                        System.out.println("Contact " + (i + 1) + ": " + lName +
                            " -- " + streetAddr);
                    } else {
```

```
                    System.out.println("Contact " + (i + 1) + ": " + fName +
                        " " + lName +
                        " -- " + streetAddr);
                }
            }

            if (qr.isDone()) {
                done = true;
            } else {
                qr = connection.queryMore(qr.getQueryLocator());
            }
        }
    } else {
        System.out.println("No records found.");
    }
} catch (ConnectionException ce) {
    ce.printStackTrace();
}
}
```

Using Compound Address Fields as Locations

Compound address fields include latitude and longitude fields. Address fields can be used as locations in SOQL `WHERE` and `ORDER BY` clauses. For example, here's a SOQL query that uses the `GEOLOCATION` function to retrieve the 10 accounts closest to San Francisco.

```
SELECT Id, Name, BillingAddress
FROM Account
WHERE DISTANCE(BillingAddress, GEOLOCATION(37.775,-122.418), 'mi') < 20
ORDER BY DISTANCE(BillingAddress, GEOLOCATION(37.775,-122.418), 'mi')
LIMIT 10
```

Note: In Developer, Professional, Enterprise, Unlimited, and Performance editions, Salesforce can automatically add or update geolocation fields for Account, Contact, Lead, and WorkOrder records. To use this feature, your administrator must enable the geo data integration rule for each object. For all other objects and editions, set values for latitude and longitude by using SOQL, Workbench, SOAP or REST API, or a geocoding service. You can then use address fields as locatable values. To find geocoding services, search AppExchange.

Geolocation Compound Field

Geolocation fields are accessible in the SOAP and REST APIs as a `Location`—a structured compound data type—or as individual latitude and longitude elements.

In API versions 26.0 and later, geolocation fields are available in the SOAP and REST APIs as a compound field of type `Location`. This structured data type contains the following fields.

- `latitude`
- `longitude`

Note: SOAP calls that use API versions earlier than 30.0 return geolocation compound values as strings. See "Returned Geolocation Data Types" later in this topic.

Geolocation fields are provided on many standard objects, such as Account, Contact, Quote, and User, as part of their address field or fields. Geolocation fields can also be added as custom fields to standard or custom objects.

Note:

- A geolocation compound field is read-only, although its `latitude` and `longitude` subfields are editable. You can only access compound fields using the SOAP or REST API. For more information about working with compound fields and their subfields, see Compound Field Considerations and Limitations on page 43.
- Although geolocation fields appear as a single field in the user interface, custom geolocation fields count as *three* custom fields towards your organization's limits: one for latitude, one for longitude, and one for internal use.

Retrieving Compound Geolocation Fields

Using compound fields can simplify code that works with geolocations, especially for SOQL queries. SOQL `SELECT` clauses can reference geolocations directly, instead of the individual component fields.

```
SELECT location__c
FROM Warehouse__c
```

To write code that's compatible with API versions earlier than 26.0 and with API versions 26.0 and later, use the individual latitude and longitude fields.

```
SELECT location__latitude__s, location__longitude__s
FROM Warehouse__c
```

Returned Geolocation Data Types

A compound geolocation field value is returned as the structured data type `Location`. Code that works with compound geolocation fields must reference the individual components of the returned value. See the sample code in Address Compound Fields on page 41.

In API versions earlier than 30.0, SOAP calls return compound geolocation field values as strings, instead of as a structured data type, for backward compatibility. If you plan to display your latitude and longitude values or pass them to a service that expects strings, use the values that are returned. If you plan to use the values in mathematical calculations or pass them to a map service that expects numbers, cast the results to numbers.

The string value format is:

```
API location: [latitudeValue longitudeValue]
```

An example of a regular expression to parse out the latitude and longitude values is:

```
API location: \[([-+]?\d{1,2}([.]\d+)?) ([-+]?\d{1,3}([.]\d+)?)]
```

The first capture is the latitude, and the third is the longitude.

Compound Field Considerations and Limitations

Address and geolocation compound fields are convenient and result in more concise, clear code. Here are some things to consider when using them in your apps.

Both address and geolocation compound fields have the following limitations.

- Compound fields are read-only. To update field values, modify the individual field components.
- Compound fields are accessible only through the SOAP and REST APIs. The compound versions of fields aren't accessible anywhere in the Salesforce user interface.

- Although compound fields can be queried with the `Location` and `Address` Apex classes, they're editable only as components of the actual field. Read and set geolocation field components by appending "__latitude__s" or "__longitude__s" to the field name, instead of the usual "__c." For example:

  ```
  Double theLatitude = myObject__c.aLocation__latitude__s;
  myObject__c.aLocation__longitude__s = theLongitude;
  ```

  You can't access or set the compound value.
- You can't use compound fields in Visualforce—for example, in an `<apex:outputField>`. To access or update field values, use the individual field components.
- If you select compound fields for export in the Data Loader, they cause error messages. To export values, use individual field components.
- Custom geolocation and location fields on standard addresses aren't supported with email templates.
- You can't use compound fields in lookup filters, except to filter distances that are within or not within given ranges. You can use distance lookup filters only in the Metadata API.
- The only formula functions that you can use with compound fields are `ISBLANK`, `ISCHANGED`, and `ISNULL`. You can't use `BLANKVALUE`, `CASE`, `NULLVALUE`, `PRIORVALUE`, or the equality and comparison operators with compound fields. The equality and comparison operators include `=` and `==` (equal), `<>` and `!=` (not equal), `<` (less than), `>` (greater than), `<=` (less than or equal), `>=` (greater than or equal), `&&` (AND), and `||` (OR).

Address compound fields have the following limitations.

- Compound address fields are available only for address fields that exist as part of the standard objects included in Salesforce. You can't create custom compound address fields.
- In Developer, Professional, Enterprise, Unlimited, and Performance editions, Salesforce can automatically add or update geolocation fields for Account, Contact, Lead, and WorkOrder records. To use this feature, your administrator must enable the geo data integration rule for each object. For all other objects and editions, set values for latitude and longitude by using SOQL, Workbench, SOAP or REST API, or a geocoding service. You can then use address fields as locatable values. To find geocoding services, search AppExchange.
- The accuracy subfield of address fields is populated only when an address is geocoded. Typically, geocoding service providers provide accuracy data for an address's latitude and longitude coordinates.
- Address fields can't be used in `WHERE` statements in SOQL. Address fields aren't filterable, but the `isFilterable()` method of the `DescribeFieldResult` Apex class erroneously returns `true` for address fields.

Geolocation compound fields have the following limitations.

- Geolocation fields aren't supported in custom settings.
- Geolocation fields aren't available in dashboards or Schema Builder.
- Geolocation fields are available in Visual Workflow and in formula-based workflow and approvals, but they can't be used in filter-based workflow updates and approvals.
- `DISTANCE` formulas are supported in:
  - Entry criteria for workflow rules and approval processes
  - Field update actions in workflow rules and approval processes
  - Custom validation rules
  - Lookup filters (in the Metadata API only)
- Geolocation fields and latitude and longitude on standard addresses aren't supported in Salesforce to Salesforce.
- In Developer, Professional, Enterprise, Unlimited, and Performance editions, Salesforce can automatically add or update geolocation fields for Account, Contact, Lead, and WorkOrder records. To use this feature, your administrator must enable the geo data integration

rule for each object. For all other objects and editions, set values for latitude and longitude by using SOQL, Workbench, SOAP or REST API, or a geocoding service. You can then use address fields as locatable values. To find geocoding services, search AppExchange.

- Geolocation fields are supported in SOQL with the following limitations.
  - `DISTANCE` and `GEOLOCATION` are supported in `WHERE` and `ORDER BY` clauses in SOQL, but not in `GROUP BY`. `DISTANCE` is supported in `SELECT` clauses.
  - `DISTANCE` supports only the logical operators > and <, returning values within (<) or beyond (>) a specified radius.
  - When using the `GEOLOCATION` function in SOQL queries, the geolocation field must precede the latitude and longitude coordinates. For example, `DISTANCE(warehouse_location__c, GEOLOCATION(37.775,-122.418), 'km')` works but `DISTANCE(GEOLOCATION(37.775,-122.418), warehouse_location__c, 'km')` doesn't work.
  - Apex bind variables aren't supported for the units parameter in the `DISTANCE` function. This query doesn't work.

```
String units = 'mi';
List<Account> accountList =
    [SELECT ID, Name, BillingLatitude, BillingLongitude
     FROM Account
     WHERE DISTANCE(My_Location_Field__c, GEOLOCATION(10,10), :units) < 10];
```

For more information and examples, see the *SOQL and SOSL Reference*.

API Data Types and Salesforce Field Types

Generally, API data types and field types in the user interface have the same names. For example, a date field is represented by a date data type in the API. However, some field types are represented differently depending on whether you are inspecting an object via the API or the user interface. The following table contains the mapping for field types and data types that are different:

API Data Type	Corresponding Field Types in the User Interface
ID	Lookup relationship, master-detail relationship
string	Auto number, email, phone, picklist, multi-select picklist, text, text area, long text area, rich text area, data category group reference and URL. Different maximum lengths are specified in the WSDL for text, text area, and long text area.
boolean	Checkbox
double	Currency, formula, number, percent, and roll-up summary
Varies by type	When formula fields are created in the user interface, a type must be specified. This type corresponds to the API data type of the same name: currency, date, date/time, number, percent, or text.

All other fields that you can create in the user interface fall into one of the following categories:

- The field is not available in both the user interface and the API. For example, the BusinessHours object has fields of API data type time, but you cannot create a custom field of this type.
- Field types are the same as their corresponding API data type. For example, if you create a date field in the user interface, that field is the date data type in the API.

For more information about API data types, see Primitive Data Types and Field Types.

Core Data Types Used in API Calls

Many calls in the API use the following data types:

- sObject
- ID (String). See ID Field Type.

The API also uses several error handling objects. If an error occurs during a SOAP request, the API returns a SOAP fault message. The message contains different content, depending on the type of error:

- If an error affects the entire request, an API Fault Element, is returned, containing an ExceptionCode and the associated error message text.
- If the error affects some records and not others, an Error is returned, containing a StatusCode. These errors typically occur during bulk operations, such as creating, updating, or deleting multiple records with a single call.

sObject

An sObject represents an object, such as an Account or Campaign. For a list of standard objects, see Standard Objects.

An sObject has the following properties:

Name	Type	Description
`fieldsToNull`	string[]	Array of one or more field names whose value you want to explicitly set to `null`. When used with `update()` or `upsert()`, you can specify only those fields that you can update and that have the `nillable` property. When used with `create()`, you can specify only those fields that you can create and that have the `nillable` or the `default on create` property. For example, if specifying an ID field or required field results in a runtime error, you can specify that field name in `fieldsToNull`. Similarly, if a picklist field has a default value and you want to set the value to `null` instead, specify the field in `fieldsToNull`.
`ID`	ID	Unique ID for this individual object. For the `create()` call, this value is null. For all other API calls, this value must be specified.

API Fault Element

An `ApiFault` element contains information about a fault that occurs when processing a service request. The `ApiFault` element has the following properties.

Name	Type	Description
`exceptionCode`	ExceptionCode	A code that characterizes the exception. The full list of exception codes is available in the WSDL file for your org. See Generating the WSDL File for Your Organization.
`exceptionMessage`	string	Exception message text.
`extendedErrorDetails`	ExtendedErrorDetails	More details about the exception, including an extended error code and extra error properties, when available. Reserved for future use.

The following table lists the API fault elements that represent all the API faults that can occur.

Fault	Description
ApiQueryFault	The row and column numbers where the problem occurred.
LoginFault	An error occurred during the login() call.
InvalidSObjectFault	An invalid sObject in a describeSObject(), describeSObjects(), describeLayout(), describeDataCategoryGroups(), describeDataCategoryGroupStructures(), create(), update(), retrieve(), or query() call.
InvalidFieldFault	An invalid field in a retrieve() or query() call.
InvalidOrNullForRestrictedPicklist	An invalid appMenuType in a describeAppMenu() call.
MalformedQueryFault	A problem in the queryString passed in a query() call.
InvalidQueryLocatorFault	A problem in the queryLocator passed in a queryMore() call.
MalformedSearchFault	A problem in the search passed in a search() call.
InvalidIdFault	A specified ID was invalid in a setPassword() or resetPassword() call.
UnexpectedErrorFault	An unexpected error occurred. The error is not associated with any other API fault.

ExceptionCode

The following list of ExceptionCode values is defined in your WSDL file. Some codes don't appear in your WSDL, depending on the features you have enabled.

API_CURRENTLY_DISABLED
Because of a system problem, API functionality is temporarily unavailable.

API_DISABLED_FOR_ORG
API access has not been enabled for the org. Contact Salesforce to enable API access.

CANT_ADD_STANDARD_PORTAL_USER_TO_TERRITORY
A user with a standard portal license can't be added to a territory.

CIRCULAR_OBJECT_GRAPH
The request failed because it contained a circular object reference.

CLIENT_NOT_ACCESSIBLE_FOR_USER
The current user does not have permission to access the specified client.

CLIENT_REQUIRE_UPDATE_FOR_USER
The current user is required to use a newer version of the specified client and doesn't have access until the client is updated.

CLONE_NOT_SUPPORTED
This entity does not support the clone operation.

CLONE_FIELD_INTEGRITY_EXCEPTION
A field integrity exception occurred during the clone operation.

DELETE_REQUIRED_ON_CASCADE
The delete operation triggers a cascade delete on a record, but the logged-in user does not have delete permission on that related object.

DUPLICATE_COMM_NICKNAME
You can't create a user with the same nickname as another user.

DUPLICATE_VALUE
You can’t supply a duplicate value for a field that must be unique. For example, you can’t submit two copies of the same session ID in a `invalidateSessions()` call.

EMAIL_BATCH_SIZE_LIMIT_EXCEEDED
A method tried to process more email records than the maximum batch size.

EMAIL_TO_CASE_INVALID_ROUTING
An email to case record has been submitted for processing but the feature is not enabled.

EMAIL_TO_CASE_LIMIT_EXCEEDED
The daily converted email limit for the Email-to-Case feature has been exceeded.

EMAIL_TO_CASE_NOT_ENABLED
The Email-to-Case feature has not been enabled.

EXCEEDED_ID_LIMIT
Too many IDs were specified in a call. For example, more than 2000 IDs were requested in a `retrieve()` call, or more than 200 session IDs were specified in a `logout()` call.

EXCEEDED_LEAD_CONVERT_LIMIT
Too many IDs were sent to a `convertLead()` call.

EXCEEDED_MAX_SIZE_REQUEST
The size of the message sent to the API exceeded 50 MB.

EXCEEDED_MAX_TYPES_LIMIT
The number of object types to describe is too large.

EXCEEDED_QUOTA
The size limit for org data storage was exceeded during a `create()` call.

FUNCTIONALITY_NOT_ENABLED
Functionality has been temporarily disabled. Other calls continue to work.

INACTIVE_OWNER_OR_USER
The user or record owner is not active.

INACTIVE_PORTAL
The referenced portal is inactive.

INSUFFICIENT_ACCESS
The user does not have sufficient access to perform the operation.

INVALID_ASSIGNMENT_RULE
An invalid AssignmentRuleHeader value was specified.

INVALID_BATCH_SIZE
The query options have an invalid batch size value.

INVALID_CLIENT
The client is invalid.

INVALID_CROSS_REFERENCE_KEY
An invalid foreign key can’t be set on a field. For example, an object share, such as AccountShare, can’t be deleted because the share row is a result of a sharing rule.

`INVALID_FIELD`
The specified field name is invalid.

`INVALID_FILTER_LANGUAGE`
The specified language can't be used as a filter.

`INVALID_FILTER_VALUE`
A SOQL query with `LIKE` specified an invalid character, for example, an incorrectly placed asterisk (*). Correct the query and resubmit.

`INVALID_ID_FIELD`
The specified ID is correctly formatted but isn't valid. For example, the ID is of the wrong type, or the object it identifies no longer exists.

`INVALID_GOOGLE_DOCS_URL`
An invalid Salesforce record URL was used when trying to associate a Google Doc to that record. Correct the URL before trying the operation again.

`INVALID_LOCATOR`
The locator is invalid.

`INVALID_LOGIN`
The `login()` credentials are not valid, or the maximum number of logins have been exceeded. Contact your administrator for more information.

`INVALID_NEW_PASSWORD`
The new password does not conform with the password policies of the org.

`INVALID_OPERATION`
The client application tried to modify a record that is locked by an approval process.

`INVALID_OPERATION_WITH_EXPIRED_PASSWORD`
Due to password expiration, a valid password must be set using `setPassword()` before the call can be invoked.

`INVALID_QUERY_FILTER_OPERATOR`
An invalid operator was used in the `query()` filter clause, at least for that field.

`INVALID_QUERY_LOCATOR`
An invalid `queryLocator` parameter was specified in a `queryMore()` call. It's also possible that you've exceed the maximum number of calls, which is 10 per user for the API, and 5 for Apex and Visualforce.

`INVALID_QUERY_SCOPE`
The specified search scope is invalid.

`INVALID_REPLICATION_DATE`
The date for replication is out of the allowed range, such as before the org was created.

`INVALID_SETUP_OWNER`
The setup owner must be an Organization, Profile, or User.

`INVALID_SEARCH`
The `search()` call has invalid syntax or grammar. For more information, see the *Salesforce SOQL and SOSL Reference Guide*.

`INVALID_SEARCH_SCOPE`
The specified search scope is invalid.

`INVALID_SESSION_ID`
The specified `sessionId` is malformed (incorrect length or format) or has expired. Log in again to start a new session.

INVALID_SOAP_HEADER
There is an error in the SOAP header. If you are migrating from an earlier version of the API, be advised that the SaveOptions header can't be used with API version 6.0 or later. Use AssignmentRuleHeader instead.

INVALID_SSO_GATEWAY_URL
The URL provided to configure the Single Sign-On gateway was not a valid URL.

INVALID_TYPE
The specified sObject type is invalid.

INVALID_TYPE_FOR_OPERATION
The specified sObject type is invalid for the specified operation.

LIMIT_EXCEEDED
An array is too long. For example, there are too many BCC addresses, targets, or email messages.

LOGIN_DURING_RESTRICTED_DOMAIN
The user is not allowed to log in from this IP address.

LOGIN_DURING_RESTRICTED_TIME
The user is not allowed to log in during this time period.

MALFORMED_ID
An invalid ID string was specified. For information about IDs, see ID Field Type.

MALFORMED_QUERY
An invalid query string was specified. For example, the query string was longer than 100,000 characters.

MALFORMED_SEARCH
An invalid search string was specified. For example, the search string was longer than 100,000 characters.

MISSING_ARGUMENT
A required argument is missing.

MIXED_DML_OPERATION
There are limits on what kinds of DML operations can be performed in the same transaction. For more information, see the *Lightning Platform Apex Code Developer's Guide*.

NOT_MODIFIED
The describe call response has not changed since the specified date.

NO_SOFTPHONE_LAYOUT
If an org has the CTI feature enabled, but no softphone layout has been defined, this exception is returned if a describe call is issued. This exception is most often caused because no call center has been defined. A default softphone layout is created during call center definition.

If an org doesn't have the CTI feature enabled, `FUNCTIONALITY_NOT_ENABLED` is returned instead.

NUMBER_OUTSIDE_VALID_RANGE
The number specified is outside the valid range for the field.

OPERATION_TOO_LARGE
The query has returned too many results. If certain queries are run by a user without the "View All Data" permission and many records are returned, the queries require sharing rule checking. For example, consider queries that are run on objects, such as Task, that use a polymorphic foreign key. These queries return this exception because the operation requires too many resources. To correct, add filters to the query to narrow the scope, or use filters such as date ranges to break the query up into a series of smaller queries.

ORG_LOCKED
The org has been locked. Contact Salesforce to unlock the org.

ORG_NOT_OWNED_BY_INSTANCE
: The user tried to log in to the wrong server instance. Choose another server instance or log in at `https://login.salesforce.com`. You can use `http` instead of `https`.

PASSWORD_LOCKOUT
: The user has exceeded the allowed number of login attempts. The user must contact an administrator to regain login access.

PORTAL_NO_ACCESS
: Access to the specified portal is not available.

QUERY_TIMEOUT
: The query has timed out. For more information, see the *Salesforce SOQL and SOSL Reference Guide*.

QUERY_TOO_COMPLICATED
: SOQL query is either selecting too many fields or there are too many filter conditions. Try reducing the number of formula fields referenced in the query.

REQUEST_LIMIT_EXCEEDED
: Exceeded either the concurrent request limit or the request rate limit for your org. For details on API request limits, see API Usage Metering.

REQUEST_RUNNING_TOO_LONG
: A request has taken too long to be processed.

SERVER_UNAVAILABLE
: A server that is necessary for this call is unavailable. Other types of requests could still work.

SSO_SERVICE_DOWN
: The service was unavailable, and an authentication call to the org's specified Single Sign-On server failed.

TOO_MANY_APEX_REQUESTS
: Too many Apex requests have been issued. If this exception persists, contact Salesforce Customer Support.

TRIAL_EXPIRED
: The trial period for the org has expired. A representative from the company must contact Salesforce to re-enable the org.

UNSUPPORTED_API_VERSION
: A method call was made that doesn't exist in the accessed API version, for example, trying to use `upsert()` (new in 8.0) against version 5.0.

UNSUPPORTED_CLIENT
: This version of the client is no longer supported.

Error

An `Error` contains information about an error that occurred during a `create()`, `merge()`, `process()`, `update()`, `upsert()`, `delete()`, or `undelete()` call. For more information, see Error Handling. An `Error` has the following properties:

Name	Type	Description
`statusCode`	StatusCode	A code that characterizes the error. The full list of status codes is available in the WSDL file for your org (see Generating the WSDL File for Your Organization).
`message`	string	Error message text.
`fields`	string[]	Array of one or more field names. Identifies which fields in the object, if any, affected the error condition.

Name	Type	Description
extendedErrorDetails	ExtendedErrorDetails	More details about the error, including an extended error code and extra error properties, when available. Reserved for future use.

Note: If your org has active duplicate rules and a duplicate is detected, the SaveResult includes an error with a data type of DuplicateError.

StatusCode

The following table lists API status codes that are returned with an error. Some codes don't appear in your WSDL, depending on the features you have enabled.

ALL_OR_NONE_OPERATION_ROLLED_BACK
The bulk operation was rolled back because one of the records wasn't processed successfully. See AllOrNoneHeader.

ALREADY_IN_PROCESS
You can't submit a record that is already in an approval process. Wait for the previous approval process to complete before resubmitting a request with this record.

ASSIGNEE_TYPE_REQUIRED
Designate an assignee for the approval request (ProcessInstanceStep or ProcessInstanceWorkitem).

BAD_CUSTOM_ENTITY_PARENT_DOMAIN
The changes you are trying to make can't be completed because changes to the associated master-detail relationship can't be made.

BCC_NOT_ALLOWED_IF_BCC_COMPLIANCE_ENABLED
Your client application blind carbon-copied an email address even though the org's Compliance BCC Email option is enabled. This option specifies a particular email address that automatically receives a copy of all outgoing email. When this option is enabled, you can't BCC any other email address. To disable the option, log in to the user interface and from Setup, enter *Compliance BCC Email* in the Quick Find box, then select **Compliance BCC Email**.

BCC_SELF_NOT_ALLOWED_IF_BCC_COMPLIANCE_ENABLED
Your client application blind carbon-copied the logged-in user's email address even though the org's BCC COMPLIANCE option is set to true. This option specifies a particular email address that automatically receives a copy of all outgoing email. When this option is enabled, you can't BCC any other email address. To disable the option, log in to the user interface and from Setup, enter *Compliance BCC Email* in the Quick Find box, then select **Compliance BCC Email**.

CANNOT_CASCADE_PRODUCT_ACTIVE
An update to a product caused by a cascade can't be done because the associated product is active.

CANNOT_CHANGE_FIELD_TYPE_OF_APEX_REFERENCED_FIELD
You can't change the type of a field that is referenced in an Apex script.

CANNOT_CREATE_ANOTHER_MANAGED_PACKAGE
You can create only one managed package in an org.

CANNOT_DEACTIVATE_DIVISION
You can't deactivate Divisions if an assignment rule references divisions or if the DefaultDivision field on a user record isn't set to null.

CANNOT_DELETE_LAST_DATED_CONVERSION_RATE
If dated conversions are enabled, you must have at least one DatedConversionRate record.

CANNOT_DELETE_MANAGED_OBJECT
You can't modify components that are included in a managed package.

CANNOT_DISABLE_LAST_ADMIN
You must have at least one active administrator user.

CANNOT_ENABLE_IP_RESTRICT_REQUESTS
If you exceed the limit of five IP ranges specified in a profile, you can't enable restriction of login by IP addresses. Reduce the number of specified ranges in the profile and try the request again.

CANNOT_INSERT_UPDATE_ACTIVATE_ENTITY
You do not have permission to create, update, or activate the specified record.

CANNOT_MODIFY_MANAGED_OBJECT
You can't modify components that are included in a managed package.

CANNOT_RENAME_APEX_REFERENCED_FIELD
You can't rename a field that is referenced in an Apex script.

CANNOT_RENAME_APEX_REFERENCED_OBJECT
You can't rename an object that is referenced in an Apex script.

CANNOT_REPARENT_RECORD
You can't define a new parent record for the specified record.

CANNOT_RESOLVE_NAME
A `sendEmail()` call could not resolve an object name.

CANNOT_UPDATE_CONVERTED_LEAD
A converted lead could not be updated.

CANT_DISABLE_CORP_CURRENCY
You can't disable the corporate currency for an org. To disable a currency that is set as the corporate currency, first use the user interface to change the corporate currency to a different currency. Then disable the original currency.

CANT_UNSET_CORP_CURRENCY
You can't change the corporate currency for an org from the API. Use the user interface to change the corporate currency.

CHILD_SHARE_FAILS_PARENT
If you don't have appropriate permissions on a parent record, you can't change the owner of or define sharing rules for a child record. For example, you can't change the owner of a contact record if you can't edit its parent account record.

CIRCULAR_DEPENDENCY
You can't create a circular dependency between metadata objects in your org. For example, public group A can't include public group B, if public group B already includes public group A.

COMMUNITY_NOT_ACCESSIBLE
You do not have permission to access the Experience Cloud site that this entity belongs to. You must be given permission to access the site before you can access this entity.

CUSTOM_CLOB_FIELD_LIMIT_EXCEEDED
You can't exceed the maximum size for a CLOB field.

CUSTOM_ENTITY_OR_FIELD_LIMIT
You have reached the maximum number of custom objects or custom fields for your org.

CUSTOM_FIELD_INDEX_LIMIT_EXCEEDED
You have reached the maximum number of indexes on a field for your org.

CUSTOM_INDEX_EXISTS
You can create only one custom index per field.

CUSTOM_LINK_LIMIT_EXCEEDED
You have reached the maximum number of custom links for your org.

CUSTOM_METADATA_LIMIT_EXCEEDED
Your org has reached its custom metadata maximum limit.

CUSTOM_SETTINGS_LIMIT_EXCEEDED
Your org has reached its custom settings maximum limit.

CUSTOM_TAB_LIMIT_EXCEEDED
You have reached the maximum number of custom tabs for your org.

DELETE_FAILED
You can't delete a record because it is in use by another object.

DEPENDENCY_EXISTS
You can't perform the requested operation because of an existing dependency on the specified object or field.

DUPLICATE_CASE_SOLUTION
You can't create a relationship between the specified case and solution because it already exists.

DUPLICATE_CUSTOM_ENTITY_DEFINITION
Custom object or custom field IDs must be unique.

DUPLICATE_CUSTOM_TAB_MOTIF
You can't create a custom object or custom field with a duplicate master name.

DUPLICATE_DEVELOPER_NAME
You can't create a custom object or custom field with a duplicate developer name.

DUPLICATES_DETECTED
Duplicate records have been detected. Used for an Error object with a data type of DuplicateError.

DUPLICATE_EXTERNAL_ID
A user-specified external ID matches more than one record during an upsert.

DUPLICATE_MASTER_LABEL
You can't create a custom object or custom field with a duplicate master name.

DUPLICATE_SENDER_DISPLAY_NAME
A `sendEmail()` call could not choose between OrgWideEmailAddress.`DisplayName` or `senderDisplayName`. Define only one of the two fields.

DUPLICATE_USERNAME
A create, update, or upsert failed because of a duplicate user name.

DUPLICATE_VALUE
You can't supply a duplicate value for a field that must be unique. For example, you can't submit two copies of the same session ID in a `invalidateSessions()` call.

EMAIL_ADDRESS_BOUNCED
Emails to one or more recipients have bounced. Check the email addresses to make sure that they are valid.

EMAIL_NOT_PROCESSED_DUE_TO_PRIOR_ERROR
Because of an error earlier in the call, the current email was not processed.

EMAIL_OPTED_OUT
A single email message was sent with the `REJECT` setting in the `optOutPolicy` field to recipients that have opted out from receiving email. To avoid this error, set the `optOutPolicy` field to another value.

EMAIL_TEMPLATE_FORMULA_ERROR
The email template is invalid and can't be rendered. Check the template for incorrectly specified merge fields.

`EMAIL_TEMPLATE_MERGEFIELD_ACCESS_ERROR`
You don’t have access to one or more merge fields in this template. To request access, contact your Salesforce administrator.

`EMAIL_TEMPLATE_MERGEFIELD_ERROR`
One or more merge fields don’t exist. Check the spelling of field names.

`EMAIL_TEMPLATE_MERGEFIELD_VALUE_ERROR`
One or more merge fields have no value. To provide values, update the records before sending the email.

`EMAIL_TEMPLATE_PROCESSING_ERROR`
The merge fields in this email template can’t be processed. Ensure that your template body is valid.

`EMPTY_SCONTROL_FILE_NAME`
The Scontrol file name was empty, but the binary was not empty.

`ENTITY_FAILED_IFLASTMODIFIED_ON_UPDATE`
If the value in a record’s `LastModifiedDate` field is later than the current date, you can’t update the record .

`ENTITY_IS_ARCHIVED`
If a record has been archived, you can’t access it.

`ENTITY_IS_DELETED`
You can’t reference an object that has been deleted. This status code occurs only in API version 10.0 and later. Previous releases of the API use `INVALID_ID_FIELD` for this error.

`ENTITY_IS_LOCKED`
You can’t edit a record that is locked by an approval process.

`ENVIRONMENT_HUB_MEMBERSHIP_CONFLICT`
You can’t add an org to more than one Environment Hub.

`ERROR_IN_MAILER`
An email address is invalid, or another error occurred during an email-related transaction.

`FAILED_ACTIVATION`
The activation of a Contract failed.

`FIELD_CUSTOM_VALIDATION_EXCEPTION`
You can't define a custom validation formula that violates a field integrity rule.

`FIELD_FILTER_VALIDATION_EXCEPTION`
You can't violate field integrity rules.

`FILTERED_LOOKUP_LIMIT_EXCEEDED`
The creation of the lookup filter failed because it exceeds the maximum number of lookup filters allowed per object.

`HTML_FILE_UPLOAD_NOT_ALLOWED`
Your attempt to upload an HTML file failed. HTML attachments and documents, including HTML attachments to a Solution, can't be uploaded if the `Disallow HTML documents and attachments` checkbox is selected on the HTML Documents and Attachments Settings page.

`IMAGE_TOO_LARGE`
The image exceeds the maximum width, height, and file size.

`INACTIVE_OWNER_OR_USER`
The owner of the specified item is an inactive user. To reference this item, either reactivate the owner or reassign ownership to another active user.

INSERT_UPDATE_DELETE_NOT_ALLOWED_DURING_MAINTENANCE
Starting with version 32.0, you can't create, update, or delete data while the instance where your org resides is being upgraded to the latest release. Try again after the release has completed. For release schedules, see `trust.salesforce.com`. Before version 32.0, the code is `INVALID_READ_ONLY_USER_DML`.

INSUFFICIENT_ACCESS_ON_CROSS_REFERENCE_ENTITY
An operation affects an object that is cross-referenced by the specified object, but the logged-in user doesn't have sufficient permissions on the cross-referenced object. For example, a logged-in user attempts to modify an account record, and the update creates a ProcessInstanceWorkitem. If the user doesn't have permission to approve, reject, or reassign the ProcessInstanceWorkitem, this exception occurs.

INSUFFICIENT_ACCESS_OR_READONLY
You can't perform the specified action because you don't have sufficient permissions.

INVALID_ACCESS_LEVEL
You can't define a new sharing rule that provides less access than the specified org-wide default.

INVALID_ARGUMENT_TYPE
You supplied an argument that is of the wrong type for the operation being attempted.

INVALID_ASSIGNEE_TYPE
You specified an assignee type that is not a valid integer between one and six.

INVALID_ASSIGNMENT_RULE
You specified an assignment rule that is invalid or that isn't defined in the org.

INVALID_BATCH_OPERATION
The specified batch operation is invalid.

INVALID_CONTENT_TYPE
The outgoing email has anEmailFileAttachment with an invalid`contentType` property. See RFC2045 - Internet Message Format.

INVALID_CREDIT_CARD_INFO
The specified credit card information is not valid.

INVALID_CROSS_REFERENCE_KEY
The specified value in a relationship field is not valid, or data is not of the expected type.

INVALID_CROSS_REFERENCE_TYPE_FOR_FIELD
The specified cross-reference type is not valid for the specified field.

INVALID_CURRENCY_CONV_RATE
Specify a positive, non-zero value for the currency conversion rate.

INVALID_CURRENCY_CORP_RATE
You can't modify the corporate currency conversion rate.

INVALID_CURRENCY_ISO
The specified currency ISO code is not valid.

INVALID_EMAIL_ADDRESS
A specified email address is invalid.

INVALID_EMPTY_KEY_OWNER
You can't set the value for `owner` to null.

INVALID_EVENT_SUBSCRIPTION
Invalid parameters were specified when subscribing to an event.

INVALID_FIELD
You specified an invalid field name when trying to update or upsert a record.

INVALID_FIELD_FOR_INSERT_UPDATE
You can't combine a person account record type change with any other field update.

INVALID_FIELD_WHEN_USING_TEMPLATE
You can't use an email template with an invalid field name.

INVALID_FILTER_ACTION
The specified filter action can't be used with the specified object. For example, an alert is not a valid filter action for a Task.

INVALID_ID_FIELD
The specified ID field (`ID`, `ownerId`), or cross-reference field is invalid.

INVALID_INET_ADDRESS
A specified Inet address is not valid.

INVALID_LINEITEM_CLONE_STATE
You can't clone a Pricebook2 or PricebookEntry record that isn't active.

INVALID_MASTER_OR_TRANSLATED_SOLUTION
The solution is invalid. For example, this exception occurs if you try to associate a translated solution with a master solution that's associated with another translated solution.

INVALID_MESSAGE_ID_REFERENCE
The outgoing email's References or In-Reply-To fields are invalid. These fields must contain valid Message-IDs. See RFC2822 - Internet Message Format.

INVALID_OPERATION
There is no applicable approval process for the specified object.

INVALID_OPERATOR
The specified operator is not applicable for the field type when used as a workflow filter.

INVALID_OR_NULL_FOR_RESTRICTED_PICKLIST
You specified an invalid or null value for a restricted picklist.

INVALID_PARTNER_NETWORK_STATUS
The specified partner network status is invalid for the specified template field.

INVALID_PERSON_ACCOUNT_OPERATION
You can't delete a person account.

INVALID_READ_ONLY_USER_DML
Version 31.0 and earlier: You can't create, update, or delete data while the instance where your org resides is being upgraded to the latest release. Try again after the release has completed. For release schedules, see `trust.salesforce.com`. After version 31.0, the code is `INSERT_UPDATE_DELETE_NOT_ALLOWED_DURING_MAINTENANCE`.

INVALID_SAVE_AS_ACTIVITY_FLAG
Specify `true` or `false` for the `saveAsActivity` flag.

INVALID_SESSION_ID
The specified `sessionId` is malformed (incorrect length or format) or has expired. Log in again to start a new session.

INVALID_STATUS
The specified org status change is not valid.

INVALID_TYPE
The specified type is not valid for the specified object.

INVALID_TYPE_FOR_OPERATION
The specified type is not valid for the specified operation.

INVALID_TYPE_ON_FIELD_IN_RECORD
The specified value is not valid for the specified field's type.

IP_RANGE_LIMIT_EXCEEDED
The specified IP address is outside the IP range specified for the org.

JIGSAW_IMPORT_LIMIT_EXCEEDED
The number of records you attempted to purchase from Data.com exceeds your available record addition limit.

LICENSE_LIMIT_EXCEEDED
You have exceeded the number of licenses assigned to your org.

LIGHT_PORTAL_USER_EXCEPTION
You attempted an action with a customer portal that's not allowed. For example, trying to add the user to a case team.

LIMIT_EXCEEDED
You have exceeded a limit on a field size or value, license, platform event publishing, or other component.

LOGIN_CHALLENGE_ISSUED
An email containing a security token was sent to the user's email address because the user logged in from an untrusted IP address. The user can't log in until tthe security token is added to the end of the password.

LOGIN_CHALLENGE_PENDING
The user logged in from an untrusted IP address, but a security token has not yet been issued.

LOGIN_MUST_USE_SECURITY_TOKEN
The user must add a security token to the end of the password to log in.

MALFORMED_ID
An ID must be either 15 characters, or 18 characters with a valid case-insensitive extension. There is also an exception code of the same name.

MANAGER_NOT_DEFINED
A manager has not been defined for the specified approval process.

MASSMAIL_RETRY_LIMIT_EXCEEDED
A mass mail retry failed because your org has exceeded its mass mail retry limit.

MASS_MAIL_LIMIT_EXCEEDED
The org has exceeded its daily limit for mass email. Mass email messages can't be sent again until the next day.

MAXIMUM_CCEMAILS_EXCEEDED
You have exceeded the maximum number of specified CC addresses in a workflow email alert.

MAXIMUM_DASHBOARD_COMPONENTS_EXCEEDED
You have exceeded the document size limit for a dashboard.

MAXIMUM_HIERARCHY_LEVELS_REACHED
You have reached the maximum number of levels in a hierarchy.

MAXIMUM_SIZE_OF_ATTACHMENT
You have exceeded the maximum size of an attachment.

MAXIMUM_SIZE_OF_DOCUMENT
You have exceeded the maximum size of a document.

MAX_ACTIONS_PER_RULE_EXCEEDED
You have exceeded the maximum number of actions per rule.

MAX_ACTIVE_RULES_EXCEEDED
You have exceeded the maximum number of active rules.

MAX_APPROVAL_STEPS_EXCEEDED
You have exceeded the maximum number of approval steps for an approval process.

MAX_FORMULAS_PER_RULE_EXCEEDED
You have exceeded the maximum number of formulas per rule.

MAX_RULES_EXCEEDED
You have exceeded the maximum number of rules for an object.

MAX_RULE_ENTRIES_EXCEEDED
You have exceeded the maximum number of entries for a rule.

MAX_TASK_DESCRIPTION_EXCEEDED
The task description is too long.

MAX_TM_RULES_EXCEEDED
You have exceeded the maximum number of rules per Territory.

MAX_TM_RULE_ITEMS_EXCEEDED
You have exceeded the maximum number of rule criteria per rule for a Territory.

MERGE_FAILED
A merge operation failed.

MISSING_ARGUMENT
You did not specify a required argument.

NONUNIQUE_SHIPPING_ADDRESS
You can't insert a reduction order item if the original order shipping address is different from the shipping address of other items in the reduction order.

NO_APPLICABLE_PROCESS
A `process()` request failed because the record submitted does not satisfy the entry criteria of any active approval processes for which the user has permission.

NO_ATTACHMENT_PERMISSION
Your org does not permit email attachments.

NO_INACTIVE_DIVISION_MEMBERS
You can't add members to an inactive Division.

NO_MASS_MAIL_PERMISSION
You don't have permission to send the email. You must have "Mass Email" to send mass mail or "Send Email" to send individual email.

NUMBER_OUTSIDE_VALID_RANGE
The number specified is outside the valid range of values.

NUM_HISTORY_FIELDS_BY_SOBJECT_EXCEEDED
The number of history fields specified for the sObject exceeds the allowed limit.

OP_WITH_INVALID_USER_TYPE_EXCEPTION
The operation you attempted can't be performed for one or more users. For example, you can't add high-volume portal users to a group.

OPTED_OUT_OF_MASS_MAIL
An email can't be sent because the specified User has opted out of mass mail.

PACKAGE_LICENSE_REQUIRED
The logged-in user can't access an object that is in a licensed package without a license for the package.

PLATFORM_EVENT_ENCRYPTION_ERROR
The platform event messages could not be published due to a problem with encryption. A misconfiguration in your Salesforce org or a general encryption service error can cause this problem.

PLATFORM_EVENT_PUBLISHING_UNAVAILABLE
Publishing platform event messages failed due to a service being temporarily unavailable. Try again later.

PLATFORM_EVENT_PUBLISH_FAILED
The platform event message could not be published after one or more attempts because of a system error. Try again later.

PORTAL_USER_ALREADY_EXISTS_FOR_CONTACT
A create User operation failed because you can't create a second portal user under a Contact.

PRIVATE_CONTACT_ON_ASSET
You can't have a private contact on an asset.

RECORD_IN_USE_BY_WORKFLOW
You can't access a record that's in use by a workflow or approval process.

REQUEST_RUNNING_TOO_LONG
A request that has been running too long is canceled.

REQUIRED_FIELD_MISSING
A call requires a field that was not specified.

SELF_REFERENCE_FROM_TRIGGER
You can't recursively update or delete the same object from an Apex trigger. This error often occurs when:

- You try to update or delete an object from within its before trigger.
- You try to delete an object from within its after trigger.

This error occurs with both direct and indirect operations. The following is an example of an indirect operation:

1. A request is submitted to update Object A.
2. A `before update` trigger on object A creates an object B.
3. Object A is updated.
4. An `after insert` trigger on object B queries object A and updates it. This update is an indirect update of object A because of the before trigger of object A, so an error is generated.

SHARE_NEEDED_FOR_CHILD_OWNER
If a parent record has a child record that needs a sharing rule, you can't delete the sharing rule for the parent record.

SINGLE_EMAIL_LIMIT_EXCEEDED
(API version 18.0 and later) The org has exceeded its daily limit for individual emails. Individual email messages can't be sent again until the next day.

STANDARD_PRICE_NOT_DEFINED
Custom prices can't be defined without corresponding standard prices.

STORAGE_LIMIT_EXCEEDED
You have exceeded your org's storage limit.

STRING_TOO_LONG
The specified string exceeds the maximum allowed length.

TABSET_LIMIT_EXCEEDED
You have exceeded the number of tabs allowed for a tabset.

TEMPLATE_NOT_ACTIVE
The template specified is unavailable. Specify another template or make the template available for use.

TERRITORY_REALIGN_IN_PROGRESS
An operation can't be performed because a territory realignment is in progress.

TEXT_DATA_OUTSIDE_SUPPORTED_CHARSET
The specified text uses a character set that is not supported.

TOO_MANY_APEX_REQUESTS
Too many Apex requests have been sent. This error is transient. Resend your request after a short wait.

TOO_MANY_ENUM_VALUE
A request failed because too many values were passed in for a multi-select picklist. You can select a maximum of 100 values for a multi-select picklist.

TRANSFER_REQUIRES_READ
You can't assign the record to the specified User because the user does not have read permission.

UNABLE_TO_LOCK_ROW
A deadlock or timeout condition has been detected.

- A deadlock involves at least two transactions that are attempting to update overlapping sets of objects. If the transaction involves a summary field, the parent objects are locked, making these transactions especially prone to deadlocks. To debug, check your code for deadlocks and correct. Deadlocks are generally not the result of an issue with Salesforce operations.
- A timeout occurs when a transaction takes too long to complete, for example, when replacing a value in a picklist or changing a custom field definition. The timeout state is temporary. No corrective action is needed.

If an object in a batch can't be locked, the entire batch fails with this error. Errors with this status code contain the IDs of the records that couldn't be locked, when available, in the error message.

UNAVAILABLE_RECORDTYPE_EXCEPTION
The appropriate default record type could not be found.

UNDELETE_FAILED
An object could not be undeleted because it does not exist or has not been deleted.

UNKNOWN_EXCEPTION
The system encountered an internal error. Report this problem to Salesforce.

Note: Do not report this exception code to Salesforce if it results from a `sendEmail()` call. The `sendEmail()` call returns this exception code when it is used to send an email to one or more recipients who have the **Email Opt Out** option selected.

UNSPECIFIED_EMAIL_ADDRESS
The specified user does not have an email address.

UNSUPPORTED_APEX_TRIGGER_OPERATION
You can't save recurring events with an Apex trigger.

UNVERIFIED_SENDER_ADDRESS
A `sendEmail()` call attempted to use an unverified email address defined in the OrgWideEmailAddress object.

WEBLINK_SIZE_LIMIT_EXCEEDED
The size of a WebLink URL or JavaScript code exceeds the limit.

`WEBLINK_URL_INVALID`
The WebLink URL has failed the URL string validation check.

`WRONG_CONTROLLER_TYPE`
The controller type for your Visualforce email template does not match the object type being used.

If you receive a status code not listed in the previous table, contact Customer Support.

ExtendedErrorDetails

Reserved for future use. An `ExtendedErrorDetails` element contains extra detailed information about an error. The `ExtendedErrorDetails` element has the following properties.

Name	Type	Description
`extendedErrorCode`	ExtendedErrorCode	A code that characterizes the extended error details.
`extended error property`	Varies	An extended error property that contains more information about the error. The property name and value vary based on the extended error code.

Duplicate Management Data Types

DuplicateError

Contains information about an error that occurred when an attempt was made to save a duplicate record. Use if your organization has set up duplicate rules, which are part of the Duplicate Management feature.

Fields

Field	Details
`duplicateResult`	**Type** DuplicateResult **Description** The details of a duplicate rule and duplicate records found by the duplicate rule.
`fields`	**Type** string[] **Description** Array of one or more field names. Identifies which fields in the object, if any, affected the error condition.
`message`	**Type** string **Description** Error message text.

Field	Details
statusCode	**Type** StatusCode **Description** A code that characterizes the error. The full list of status codes is available in the WSDL file for your organization (see Generating the WSDL File for Your Organization).

Usage

DuplicateError and its constituent objects are available to organizations that use duplicate rules.

DuplicateError is a data type of Error.

To process duplicates, loop through all the Error objects in the `errors` field on SaveResult. An Error object with a data type of DuplicateError contains information about an error that occurred when an attempt was made to save a duplicate record. To access information about the duplicates, use the `duplicateResult` field.

Java Sample

Here is a sample that shows how to see if there are any errors on the saveResult with a data type of DuplicateError. If so, duplicates were detected. See DuplicateResult for a full code sample that shows how to block users from entering duplicate leads and display an alert and a list of duplicates.

```
if (!saveResult.isSuccess()) {
    for (Error e : saveResult.getErrors()) {
        if (e instanceof DuplicateError) {
            System.out.println("Duplicate(s) Detected for lead with ID: " +
leads[i].getId());
            System.out.println("ERROR MESSAGE: " + e.getMessage());
            System.out.println("STATUS CODE: " + e.getStatusCode());
            DuplicateResult dupeResult = ((DuplicateError)e).getDuplicateResult();
            System.out.println("Found the following duplicates...");
            for (MatchResult m : dupeResult.getMatchResults()) {
                if (m.isSuccess()) {
                    System.out.println("The match rule that was triggered was " +
m.getRule());
                    for (MatchRecord mr : m.getMatchRecords()) {
                       System.out.println("Your record matched " + mr.getRecord().getId()
 + " of type "
                            + mr.getRecord().getType());
                        System.out.println("The match confidence is " +
mr.getMatchConfidence());
                    }
                }
            }
        }
    }
}
```

DuplicateResult

Represents the details of a duplicate rule that detected duplicate records and information about those duplicate records.

Fields

Field	Details
`allowSave`	**Type** boolean **Description** `true` if duplicates are allowed to be saved. `false` if duplicates are not allowed to be saved.
`duplicateRule`	**Type** string **Description** The name of the duplicate rule that detected duplicate records.
`duplicateRuleEntityType`	**Type** string **Description** The name of the duplicate rule that detected duplicate records.
`errorMessage`	**Type** string **Description** The error message configured by the administrator to warn users they are potentially creating duplicate records. This message is associated with a duplicate rule.
`matchResults`	**Type** MatchResult **Description** The duplicate records and related match information.

Usage

DuplicateResult and its constituent objects are available to organizations that use duplicate rules.

Java Sample

Here is a sample that shows how to block users from entering duplicate leads and display an alert and a list of duplicates.

```
package com.doc.example;

import java.io.FileNotFoundException;
```

```
import com.sforce.soap.partner.*;
import com.sforce.soap.partner.Error;
import com.sforce.soap.partner.sobject.SObject;
import com.sforce.ws.ConnectionException;
import com.sforce.ws.ConnectorConfig;

public class SaveResultsWithDupeHeader {

    private PartnerConnection partnerConnection = null;
    static SaveResultsWithDupeHeader tester;

    public static void main(String[] args) {
        tester = new SaveResultsWithDupeHeader();
        try {
            tester.demoDuplicateRuleHeader();
        } catch (Exception e) {
            e.printStackTrace();
        }
    }

    /*
     * Make sure that you have an active lead duplicate rule linked to an active matching
 rule. This method tries to save
     * an array of leads and inspects whether any duplicates were detected
     */
   public void demoDuplicateRuleHeader() throws FileNotFoundException, ConnectionException
 {
        // Create the configuration for the partner connection
        ConnectorConfig config = new ConnectorConfig();
        config.setUsername("user@domain.com");
        config.setPassword("secret");
        config.setAuthEndpoint("authEndPoint");
        config.setTraceFile("traceLogs.txt");
        config.setTraceMessage(true);
        config.setPrettyPrintXml(true);

        // Initialize the connection
        partnerConnection = new PartnerConnection(config);

        // Get the leads that have to be saved
        SObject[] leads = getLeadsForInsertOrUpdate();

        /* Set a duplicate rule header to return a result if duplicates are detected
         * This sets the allowSave, includeRecordDetails, and runAsCurrentUser flags to
true
         */
        partnerConnection.setDuplicateRuleHeader(true, true, true);

        // Save the leads
        SaveResult[] saveResults = partnerConnection.create(leads);

        // Check the results to see if duplicates were detected
        for (int i = 0; i < leads.length; i++) {
```

```
            SaveResult saveResult = saveResults[i];
            if (!saveResult.isSuccess()) {
                for (Error e : saveResult.getErrors()) {
                    // See if there are any errors on the saveResult with a data type of
DuplicateError
                    if (e instanceof DuplicateError) {
                        System.out.println("Duplicate(s) Detected for lead with ID: " +
leads[i].getId());
                        System.out.println("ERROR MESSAGE: " + e.getMessage());
                        System.out.println("STATUS CODE: " + e.getStatusCode());
                        DuplicateResult dupeResult =
((DuplicateError)e).getDuplicateResult();
                        System.out.println("Found the following duplicates...");
                        for (MatchResult m : dupeResult.getMatchResults()) {
                            if (m.isSuccess()) {
                                System.out.println("The match rule that was triggered was
 " + m.getRule());
                                for (MatchRecord mr : m.getMatchRecords()) {
                                    System.out.println("Your record matched " +
mr.getRecord().getId() + " of type "
                                            + mr.getRecord().getType());
                                    System.out.println("The match confidence is " +
mr.getMatchConfidence());
                                    for (FieldDiff f : mr.getFieldDiffs()) {
                                        System.out.println("For field " + f.getName() + "
 field difference is "
                                                + f.getDifference().name());
                                    }
                                }
                            }
                        }
                    }
                }
            }
        }

        // Clear the duplicate rule header
        partnerConnection.clearDuplicateRuleHeader();
    }

    /**
     * The assumption here is that this method is retrieving leads from either UI, a data
 source, etc
     */
    private SObject[] getLeadsForInsertOrUpdate() {
        return new SObject[0];
    }

}
```

MatchResult

Represents the duplicate results for a matching rule.

Fields

Field	Details
`errors`	**Type** Error[] **Description** Errors that occurred during matching for the matching rule.
`entityType`	**Type** string **Description** The entity type of the matching rule.
`matchEngine`	**Type** string **Description** The match engine for the matching rule.
`matchRecords`	**Type** MatchRecord[] **Description** Information about the duplicates detected by the matching rule.
`rule`	**Type** string **Description** The developer name of the matching rule that detected duplicates.
`size`	**Type** int **Description** The number of duplicates detected by the matching rule.
`success`	**Type** boolean **Description** `true` if the matching rule successfully ran. `false` if there's an error with the matching rule.

Usage

MatchResult and its constituent objects are available to organizations that use duplicate rules.

There is 1 MatchResult for each saved record that has duplicates. The MatchResult contains all duplicates for that saved record.

Java Sample

Here is a sample that shows how to display the ID and type of all duplicates detected when leads are saved. See DuplicateResult for a full code sample that shows how to block users from entering duplicate leads and display an alert and a list of duplicates.

```
for (MatchResult m : dupeResult.getMatchResults()) {
    if (m.isSuccess()) {
        System.out.println("The match rule that was triggered was " + m.getRule());
        for (MatchRecord mr : m.getMatchRecords()) {
            System.out.println("Your record matched " + mr.getRecord().getId() + " of type
 "
                 + mr.getRecord().getType());
            System.out.println("The match confidence is " + mr.getMatchConfidence());
        }
    }
}
```

MatchRecord

Represents a duplicate record detected by a matching rule.

Fields

Field	Details
`additionalInformation`	**Type** AdditionalInformationMap **Description** Other information about matched records.
`fieldDiffs`	**Type** FieldDiff[] **Description** Matching rule fields and how each field value compares for the duplicate and its matching record.
`matchConfidence`	**Type** double **Description** The ranking of how similar a matched record's data is to the data in your request. Must be equal to or greater than the value of the `minMatchConfidence` specified in your request. Returns `-1` if unused.
`record`	**Type** sObject **Description** The fields and field values for the duplicate record.

Usage

MatchRecord and its constituent objects are available to organizations that use duplicate rules.

Each MatchRecord represents a duplicate detected when a record is saved. There can be multiple MatchRecord objects for a saved record if multiple duplicates are detected.

Java Sample

Here is a sample that shows how to display the ID and type of all duplicates detected when a lead is saved. See DuplicateResult for a full code sample that shows how to block users from entering duplicate leads and display an alert and a list of duplicates.

```
for (MatchRecord mr : m.getMatchRecords()) {
    System.out.println("Your record matched " + mr.getRecord().getId() + " of type "
        + mr.getRecord().getType());
    System.out.println("The match confidence is " + mr.getMatchConfidence());
}
```

FieldDiff

Represents the name of a matching rule field and how the values of the field compare for the duplicate and its matching record.

Fields

Field	Details
`difference`	**Type** differenceType **Description** How the values of the matching rule field compare for the duplicate and its matching record. Possible values include: • `Same`: Indicates the field values match exactly. • `Different`: Indicates that the field values do not match. • `Null`: Indicates that the field values are a match because both values are blank.
`name`	**Type** string **Description** The name of a field on a matching rule that detected duplicates.

Java Sample

Here is a sample that shows how to display the matching rule field differences when a duplicate is detected. See DuplicateResult for a full code sample that shows how to block users from entering duplicate leads and display an alert and a list of duplicates.

```
for (FieldDiff f : mr.getFieldDiffs()) {
    System.out.println("For field " + f.getName() + " field difference is "
```

```
        + f.getDifference().name());
}
```

AdditionalInformationMap

Represents other information, if any, about matched records.

Fields

Field	Details
`name`	**Type** string **Description** The name of the element.
`value`	**Type** string **Description** The value of the element.

System Fields

The following fields are read-only fields found on most objects. These fields are automatically updated during API operations. For example, the ID field is automatically generated during a create operation and the LastModifiedDate is automatically updated when a user modifies a record.

Field	Field Type	Description
`Id`	ID	Globally unique string that identifies a record. For information on IDs, see ID Field Type. Because this field exists in every object, it is not listed in the field table for each object. `Id` fields have Defaulted on create and Filter access.
`IsDeleted`	boolean	Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`). Because this field does not appear in all objects, it is listed in the field table for each object.
		Audit Fields
`CreatedById`	reference	ID of the User who created this record. `CreatedById` fields have Defaulted on create and Filter access.
`CreatedDate`	dateTime	Date and time when this record was created. `CreatedDate` fields have Defaulted on create and Filter access.
`LastModifiedById`	reference	ID of the User who last updated this record. `LastModifiedById` fields have Defaulted on create and Filter access.

Field	Field Type	Description
`LastModifiedDate`	dateTime	Date and time when a user last modified this record. `LastModifiedDate` fields have Defaulted on create and Filter access.
`SystemModstamp`	dateTime	Date and time when a user or automated process (such as a trigger) last modified this record. In this context, "trigger" refers to Salesforce code that runs to implement standard functionality, and not an Apex trigger. `SystemModstamp` fields have Defaulted on create and Filter access.

Note: Audit Fields with the dateTime field type have a certain range of valid dates. Unlike other dateTime fields, the earliest valid date is 1970-01-01T00:00:00Z GMT, or just after midnight on January 1, 1970. The latest valid date is 4000-12-31T00:00:00Z GMT, or just after midnight on December 31, 4000. These values are offset by your time zone. For example, in the Pacific time zone, the earliest valid date is 1969-12-31T16:00:00, or 4:00 PM on December 31, 1969.

If you import data into Salesforce and want to retain the audit field values of the source system, you can set the values for audit fields on the following objects: Account, ArticleVersion, Attachment, CampaignMember, Case, CaseComment, Contact, ContentVersion, Contract, Event, Idea, IdeaComment, Lead, Opportunity, Question, Task, Vote, and custom objects. The only audit field you cannot set a value for is `systemModstamp`.

1. From Setup, enter *`User Interface`* in the `Quick Find` box, then select **User Interface** under Customize.
2. Under Setup, select **Enable "Set Audit Fields upon Record Creation" and "Update Records with Inactive Owners" User Permissions**.
3. In the permission set or profile that you want to set audit fields with, enable the permission **Set Audit Fields upon Record Creation**.
4. Using the API, create a record and set its audit fields.

Not all standard objects have all audit fields. Check the Enterprise WSDL to verify which audit fields are available for a given object.

Parent Reference Fields

If an object has a relationship to a parent object, two fields are added.

- *`Parent_Name`* contains the object name of the parent. For example, Case has a `Contact` field that contains a reference to the contact parent of the case.
- *`Parent_NameId`* contains the ID of the parent. For example, Case has a `ContactId` field that refers to the contact parent of the case. This field is used in SOQL relationship queries such as the following:

```
SELECT Case.ContactId, Case.Contact.Name FROM Case
```

Even if the object can parent itself, these fields occur. For example, the Campaign object has a `Campaign` and `CampaignId` field for referencing the parent Campaign.

Required Fields

Required fields must have a non-`null` value. This rule affects the create and update calls:

- In a create call, the system automatically populates the data for certain required fields (such as system fields and the object ID fields). Similarly, if a required field has a default value (its `defaultedOnCreate attribute` is set to `true`, as described in Field in a describe result, then the system implicitly assigns a value for this field when the object is created, even if a value for this field is not explicitly passed in on the create call. For all other required fields, such as ID fields that are analogous to foreign keys in SQL, a client application must explicitly assign a value when the object is created (it cannot be `null`).

- In updates, a required field cannot be set to `null`, and many required fields can't be changed.

Any field not specified as required in the object description is optional, that is, it can be `null` when updated or created.

Some required fields for some objects require special handling.

Frequently-Occurring Fields

In addition to system fields, these fields are found on many objects.

- `OwnerId`
- `RecordTypeId`
- `CurrencyIsoCode`

`OwnerId`

Objects have an `ownerId` field that is an reference to the user who owns that object. Ownership is an important concept that affects the security model and has other implications throughout the system. Any user can query the owner field for any record they can access. However, setting the `ownerId` field has the following limitations:

- For most users and most objects, this field can't be set directly upon insert. It is implicitly set to the current user when inserting an object.
- When creating or updating a Case or Lead, a client application (that is logged in with sufficient permissions to transfer a record) can set this field to any valid User in the organization or to any valid queue of the appropriate type in the organization.
- Updating this field via the API changes only the owner of that record. The change of ownership does not cascade to associated records as it does when you transfer record ownership in the Salesforce user interface.
- Updating this field on an account deletes the existing sharing information and reapplies the organization-wide sharing defaults and sharing rules.
- To update the `ownerId` field, the user must have the "Transfer Record" permission and Read access to the new owner.

In API version 12.0 and later, if your organization has set up opportunity teams, `OwnerId` fields behave the same for Account and Opportunity objects as for other objects. That is, if you update the `OwnerId` field in either object, any AccountShare or OpportunityShare records with `RowCause` set to Sales Team are kept. In API version 11.0 and earlier, the sharing records are deleted.

`RecordTypeId`

Record types are used to offer different business processes and subsets of picklist values to different User records based on their Profile settings. (In addition, person accounts use record types to manage a number of additional elements.

Record types are configured in the user interface or by creating, editing, or deleting the RecordType object in the API. Retrieve the list of valid record type IDs (String) for an object by querying the RecordType object.

The `RecordTypeId` field in an object contains the ID of the RecordType record that is associated with a standard or custom object. You can create or update this field.

Note: You can't create or update the `RecordTypeId` field on the CampaignMember records. Set the CampaignMember record type using the `CampaignMemberRecordTypeId` field on Campaign.

When specified in a create or update call, the record type ID (String) must refer to a valid record type for that object.

Note: The `RecordTypeId` field is in your organization's WSDL only if at least one record type is configured for your organization in the Salesforce user interface.

`CurrencyIsoCode`

For organizations that have multicurrency enabled, the `CurrencyIsoCode` field contains the string representation of the currency ISO code associated with currency values in the object. Note that the User object also has a `DefaultCurrencyIsoCode` field, which is the default currency for that user. For example, a user in France could have a `DefaultCurrencyIsoCode` set to Euros, and that would be their default currency in the application. However, the User object could have currency custom fields stored in a different currency, that will correspond to the organization currency at the time the user record is created.

API Field Properties

Fields on objects represent the details of each object and are analogous to columns in a database table. Each field on each object has one or more of the following properties:

Property	Description
Aggregatable	Can be used by one of the SOQL aggregate functions.
Autonumber	The API creates an autonumber.
Create	Value for the field can be specified during create using the API.
Defaulted on create	If no other value is specified when created, a default value is supplied.
Delete	Value for the field can be deleted using the API.
Filter	Can be used as filter criteria in a SOQL query FROM or WHERE clause.
Group	Can be included in the GROUP BY clause of a SOQL query (`true`) or not (`false`). Available in API version 18.0 and later.
idLookup	Can be used to specify a record in an upsert call. The `Id` field of each object has this property and some `Name` fields. There are exceptions, so check for the property in any object you wish to upsert.
Namepointing	Indicates whether the field's value is the Name of the parent of this object (true) or not (false). Used for objects whose parents can be more than one type of object. For example, a task can have an account or a contact as a parent.
Nillable	The field can contain a null value.
Query	The field can be queried with SOQL using the API.
Restricted picklist	A picklist whose values are restricted to those values defined by a Salesforce admin. Users can't load unapproved values through the API.
Retrieve	Value of the field can be retrieved using the API.
Sort	Indicates whether a query can sort on this field (`true`) or not (`false`).
Update	Can be updated using the API.

Relationships Among Objects

Relationships associate objects with other objects. For example, a relationship can link a custom object to standard object in a related list, such as linking a custom object called Bugs to cases to track product defects associated with customer cases. To view the parent and child relationships among standard objects, see the ERD diagrams in Data Model.

Note:

- You can use parent-child relationships in SOQL queries. For more information, see Relationship Queries in the *Salesforce SOQL and SOSL Reference Guide*.
- Only lookup, external lookup, and indirect lookup relationships are available for external objects. No other relationship types are supported. See "External Object Relationships" in the Salesforce Help.

You can define different types of relationships by creating custom relationship fields on an object. The differences between relationship types include how they handle data deletion, record ownership, security, and required fields in page layouts:

- **Master-Detail (1:n)** — A parent-child relationship in which the master object controls certain behaviors of the detail object:
  - When a record of the master object is deleted, its related detail records are also deleted.
  - The `Owner` field on the detail object is not available and is automatically set to the owner of its associated master record. Custom objects on the detail side of a master-detail relationship cannot have sharing rules, manual sharing, or queues, as these require the `Owner` field.
  - The detail record inherits the sharing and security settings of its master record.
  - The master-detail relationship field is required on the page layout of the detail record.
  - By default, records can't be reparented in master-detail relationships. Administrators can, however, allow child records in master-detail relationships on custom objects to be reparented to different parent records by selecting the `Allow reparenting` option in the master-detail relationship definition.

  You can define master-detail relationships between custom objects or between a custom object and a standard object. However, the standard object cannot be on the detail side of a relationship with a custom object. In addition, you cannot create a master-detail relationship in which the User or Lead objects are the master.

  When you define a master-detail relationship, the custom object on which you are working is the detail side. Its data can appear as a custom related list on page layouts for the other object.

- **Many-to-many** — You can use master-detail relationships to model *many-to-many* relationships between any two objects. A many-to-many relationship allows each record of one object to be linked to multiple records from another object and vice versa. For example, you create a custom object called Bug that relates to the standard case object such that a bug could be related to multiple cases and a case could also be related to multiple bugs. To create a many-to-many relationship, simply create a custom junction object with two master-detail relationship fields, each linking to the objects you want to relate. See the Salesforce online help for details.

  Custom objects with two master-detail relationships are supported in API version 11 and later.

  Starting in API version 34.0, the `JunctionIdList` field type lets you manipulate the many-to-many relationship of an entity directly. You no longer need to manipulate underlying junction entity records. `JunctionIdList` fields can be queried and updated like any other field on the entity. Queries or updates to `JunctionIdList` fields act as queries or updates to the underlying junction entity records. Fields of type `JunctionIdList` appear in the WSDL as an unbounded array of type ID. `JunctionIdList` is implemented in the `Task` and `Event` objects.

- **Lookup (1:n)** — This type of relationship links two objects together, but has no effect on deletion or security. Unlike master-detail fields, lookup fields are not automatically required. When you define a lookup relationship, data from one object can appear as a custom related list on page layouts for the other object. See the Salesforce online help for details.

To create relationships, use the user interface or Salesforce Metadata API.

Relabeling Fields and Tabs and the API

The user interface allows you to change the labels on some fields and tabs. Although you cannot relabel fields or tabs using the API, you can retrieve the current values. To do so, issue a `describeSObjects()` call and inspect the label field of the returned DescribeSObjectResult.

Tooling API Objects in the Enterprise WSDL

Some objects used by the Tooling API are included in the Enterprise and Partner WSDL. Use the objects from these WSDLs instead of the Tooling WSDL if you need field-level security.

The following Tooling API objects are exposed in the Enterprise and Partner WSDL.

- BriefcaseDefinition
- DataType
- EntityDefinition
- EntityParticle
- FieldDefinition
- PicklistValueInfo
- Publisher
- SearchLayout
- Service
- ServiceDataType (Reserved for future use.)
- ServiceFieldDataType (Unavailable in version 35.0 and later. Do not use.)
- RelationshipDomain
- RelationshipInfo
- UserEntityAccess
- UserFieldAccess
- WsdlDataType (Reserved for future use.)
- XmlSchema (Reserved for future use.)

For more information, use the *Tooling API Developer's Guide*.

Salesforce AppExchange Object Prefixes and the API

If you have an unmanaged package and a managed package version becomes available, the API names of custom fields, custom objects, and Scontrol objects in the package change. A namespace prefix is added to each component to make it unique: `name__c` becomes `prefix__name__c`. To move from an unmanaged package to a managed package version of the same application, export your data, uninstall the old package, and install the new package. Then review the name changes and import your data with the relevant mapping. For details, see the *ISVforce Guide*.

Custom Object Behavior

In the user interface, you can extend your org's data by defining custom objects. Custom objects are custom database tables that allow you to store information unique to your organization. For custom objects, the `custom` flag—a Boolean field in the describe results—is `true`.

Client applications with sufficient permissions can invoke API calls on existing custom objects. You can create custom objects with the user interface, or by using the metadata WSDL with a client application or using the Salesforce Extensions for Visual Studio Code. For more information about using the metadata WSDL to create custom objects, see the *Lightning Platform Metadata API Developer's Guide*. For more information about Visual Studio Code, see *Salesforce Extensions for Visual Studio Code.*

Use the following topics to understand how the API interacts with custom objects and fields:

- Naming Conventions for Custom Objects
- Relationships Among Custom Objects
- Audit Fields for Custom Objects
- Sharing and Custom Objects
- Tags and Custom Objects
- Standard Fields for Custom Objects
- Required Fields in Custom Objects
- Managed Packages and API Names

Naming Conventions for Custom Objects

Your Salesforce administrator defines an associated name field for each custom object during setup. Custom objects must have unique names within your organization.

In the API, the names of custom objects include a suffix of two underscores followed by a lowercase "c". For example, a custom object labeled "Issue" in the Salesforce user interface is `Issue__c` in that organization's WSDL.

Relationships change the naming convention. See Relationships Among Custom Objects for more information.

For a custom object record to appear in the Salesforce user interface, its name field must be populated. If you use the API to create a custom object record that doesn't have a name, the record's ID is used as its name.

Relationships Among Custom Objects

Custom objects behave and relate to other objects just like standard objects do, as described in Relationships Among Objects. For example, cascading deletes are supported in custom objects in a Master-Detail relationship.

Custom objects can also have many-to-many relationships with other custom objects or standard objects. A many-to-many relationship allows each record of one object to be linked to multiple records from another object and vice versa. For more information, see Relationships Among Objects.

Custom objects require special treatment so that they can participate in Relationship Queries. For the relationship field name of a custom object, `__r` is appended to the name to create the ID. Also, `__c` is appended to the name to create the parent object pointer. For example, if the relationship field name is MyRel, the name of the ID becomes `MyRelId__r`, the parent object pointer becomes `MyRel__c`, and the relationship name is `MyRel__r`. For more information, see Understanding Relationship Names, Custom Objects, and Custom Fields in the *Salesforce SOQL and SOSL Reference Guide*.

This table summarizes whether a standard object can be:

- The master in a master-detail relationship with a custom object. Master-detail relationships involve cascading deletes and sharing rules that the parent controls.
- The lookup in a lookup relationship on a custom object. In other words, whether a custom object can have a lookup to the standard object.
- Extended with custom fields.

Standard Object	Master-Detail	Lookup	Custom Fields
Account	Yes	Yes	Yes
Campaign	Yes	Yes	Yes
Case	Yes	Yes	Yes
Contact	Yes	Yes	Yes
Contract	Yes	Yes	Yes
Event	No	No	Yes
Lead	No	No	Yes
Opportunity	Yes	Yes	Yes
Product2	No	Yes	Yes
Solution	Yes	Yes	Yes
Task	No	No	Yes
User	No	Yes	Yes

Audit Fields for Custom Objects

Custom objects can have the same audit fields as standard objects. When you create a custom object, the four audit fields, `CreatedById`, `CreatedDate`, `LastModifiedById`, and `LastModifiedDate`, are created and populated for the object. These fields are read only. If you import data into Salesforce custom objects and want to retain the audit field values from the source system, you can set the values when you create the custom objects. The only audit field you cannot set a value for is `SystemModstamp`. Your organization must be API enabled, and you must have the “Modify All Data” permission.

1. From Setup, enter *`User Interface`* in the `Quick Find` box, then select **User Interface** under Customize.
2. Under Setup, select **Enable “Set Audit Fields upon Record Creation” and “Update Records with Inactive Owners” User Permissions**.
3. In the permission set or profile that you want to set audit fields with, enable the permission **Set Audit Fields upon Record Creation**.
4. Using the API, create a record and set its audit fields.

Note these restrictions:

- `CreatedDate` can't be greater than the `LastModifiedDate`.
- You can't set any date field to be greater than the current time.

For more information about audit fields, see System Fields.

Sharing and Custom Objects

A sharing rule object is created for each custom object that does not have a master-detail relationship to another object. They are similar to standard object sharing rules, for example AccountOwnerSharingRule. If the user creating the custom object has the "Manage Sharing" permission, a sharing rule object is automatically created for it.

Apex sharing reasons can be retrieved describing the custom object's sharing object, and examining the information in the `rowCause` field. The name of a sharing object for each custom object is of the form: *`MyObjectName`*__Share, similar to AccountShare and other standard object sharing objects.

Tags and Custom Objects

When a custom object is created, a Tag object related to it is also created. These object names are of the form: *`MyObjectName`*__Tag, similar to AccountTag and other standard object tag objects.

Standard Fields for Custom Objects

When a custom object is created, Salesforce assigns some standard fields to the object or entity. For details, see Custom Objects.

Required Fields in Custom Objects

In the user interface, you can mark a custom field as required, and this rule is also enforced in the API. Each custom field has a `nillable` attribute, with a data type boolean. The default value is `false`. If set to `true`, each request supplies a value (or leaves the current value) to this field. Otherwise, the request fails. When the value is set to `true`, the next time the field is edited or created, the validation applies. If no value is supplied or default value specified, the request fails.

To edit the `nillable` attribute, you must log in as a user with the "Customize Application" permission.

If you change a custom object field to be required in an existing client application or integration, be sure that a value is supplied for that field. For example, if the custom picklist field `Education Level` on the contact object is required, supply a default value for that custom field. If a required field does not have a specified or default value, an error with the status code `REQUIRED_FIELD_MISSING` is returned.

Managed Packages and API Names

If you have an unmanaged package and a managed package version becomes available, the API names of custom fields, custom objects, and Scontrol objects in the package change. A namespace prefix is added to each component to make it unique: *`name`*`__c` becomes *`prefix`*`__`*`name`*`__c`. To move from an unmanaged package to a managed package version of the same application, export your data, uninstall the old package, and install the new package. Then review the name changes and import your data with the relevant mapping. For details, see the *ISVforce Guide*.

SEE ALSO:

Custom Objects

External Objects

External objects are supported in API version 32.0 and later. External objects are similar to custom objects, but external object record data is stored outside your Salesforce organization. For example, perhaps you have data that's stored on premises in an enterprise resource planning (ERP) system. Instead of copying the data into your org, you can use external objects to access the data in real time via web service callouts.

External objects are available with Salesforce Connect and Files Connect. Each external object is associated with an external data source definition in your Salesforce organization.

An external data source specifies how to access an external system. Salesforce Connect uses external data sources to access data that's stored outside your Salesforce organization. Files Connect uses external data sources to access third-party content systems. External data sources have associated external objects, which your users and the Lightning Platform use to interact with the external data and content.

By accessing record data on demand, external objects always reflect the current state of the external data. You don't have to manage a copy of that data in Salesforce, so you're not wasting storage and resources keeping data in sync.

External objects are best used when you have a large amount of data that you can't or don't want to store in your Salesforce organization, and you need to use only a small amount of data at any one time.

See "Define External Objects" in the Salesforce Help for how to create and modify external objects.

Naming Conventions for External Objects

Object names must be unique across all standard, custom, and external objects in the org.

In the API, the names of external objects are identified by a suffix of two underscores immediately followed by a lowercase "x" character. For example, an external object named "ExtraLogInfo" in the Salesforce user interface is seen as `ExtraLogInfo__x` in that organization's WSDL.

We recommend that you make object labels unique across all standard, custom, and external objects in the org.

External Object Relationships

External objects support standard lookup relationships, which use the 18-character Salesforce record IDs to associate related records with each other. However, data that's stored outside your Salesforce org often doesn't contain those record IDs. Therefore, two special types of lookup relationships are available for external objects: external lookups and indirect lookups. See "External Object Relationships" in the Salesforce Help for details.

Feature Support for External Objects

Most of the Salesforce features that support custom objects also support external objects. However, there are exceptions, and some features have special limitations and considerations for external objects. See the following topics in the Salesforce Help.

- Salesforce Compatibility Considerations for Salesforce Connect—All Adapters
- Considerations for Salesforce Connect—All Adapters

Salesforce Connect Adapters

Salesforce Connect uses a protocol-specific adapter to connect to an external system and access its data. This table describes the available adapters.

Salesforce Connect Adapter	Description	Where to Find Callout Limits
Cross-org	Uses the Lightning Platform REST API to access data that's stored in other Salesforce orgs.	No callout limits. However, each callout counts toward the API usage limits of the provider org. *Salesforce Help*: API Usage Considerations for Salesforce Connect—Cross-Org Adapter *Salesforce Limits Quick Reference Guide*: API Request Limits and Allocations
OData 2.0 OData 4.0	Uses Open Data Protocol to access data that's stored outside Salesforce. The external data must be exposed via OData producers.	*Salesforce Help*: General Limits for Salesforce Connect—OData 2.0 and 4.0 Adapters
Custom adapter created via Apex	You use the Apex Connector Framework to develop your own custom adapter when the other available adapters aren't suitable for your needs. A custom adapter can obtain data from anywhere. For example, some data can be retrieved from anywhere in the Internet via callouts, while other data can be manipulated or even generated programmatically.	*Apex Developer Guide*: Callout Limits and Limitations *Apex Developer Guide*: Execution Governors and Limits

Files Connect Adapters

Several Files Connect adapters are also available:

- Google Drive
- Box
- SharePoint Online
- OneDrive for Business

For more information about setting up Files Connect adapters see, The Files Connect Process.

For more information about Salesforce Connect, see "Salesforce Connect" in the Salesforce Help.

For details on using the Apex Connector Framework, see "Salesforce Connect" and "DataSource Namespace" in the *Apex Code Developer's Guide*.

CHAPTER 3 API Call Basics

In this chapter ...

API calls represent specific operations that your client applications can invoke at runtime to perform tasks, for example:

- Query data in your organization.
- Add, update, and delete data.
- Obtain metadata about your data.
- Run utilities to perform administration tasks.

Using your development environment, you can construct Web service client applications that use standard Web service protocols to programmatically:

- Log in to the login server (`login()`) and receive authentication information to be used for subsequent calls
- Query your organization's information (`query()`, `queryAll()`, `queryMore()`, and `retrieve()` calls)
- Perform text searches across your organization's information (`search()` call)
- Create, update, and delete data (`create()`, `merge()`, `update()`, `upsert()`, `delete()`, and `undelete()` calls)
- Perform administrative tasks, such as retrieving user information (`getUserInfo()` call), changing passwords (`setPassword()` and `resetPassword()` calls), and getting the system time (`getServerTimestamp()` call)
- Replicate data locally (`getDeleted()` and `getUpdated()` calls)
- Obtain and navigate metadata about your organization's data (`describeGlobal()`, `describeSObject()`, `describeSObjects()`, `describeLayout()`, and `describeTabs()` calls)
- Work with approval processes (`process()`)
- Return category groups and categories from your organization (`describeDataCategoryGroups()` and `describeDataCategoryGroupStructures()`).

See Core Calls, Describe Calls, and Utility Calls for complete details about each call.

Characteristics of API Calls

All API calls are:

- **Service Requests and Responses**—Your client application prepares and submits a service request to the Lightning Platform Web Service via the API, the Lightning Platform Web Service processes the request and returns a response, and the client application handles the response.
- **Synchronous**—Once the API call is invoked, your client application waits until it receives a response from the service. Asynchronous calls are not supported.
- **Committed Automatically Versus Rollback on Error**—By default, every operation that writes to a Salesforce object is committed automatically. This is analogous to the AUTOCOMMMIT setting in SQL. For `create()`, `update()`, and `delete()` calls that attempt to write to multiple records for an object, the write operation for each record is treated as a separate transaction. For example, if a client application attempts to create two new accounts, they're created using mutually exclusive insert operations that succeed or fail individually, not as a group.

  For API version 20.0 and later, there is an AllOrNoneHeader header that allows a call to roll back all changes unless all records are processed successfully. This header is supported by the `create()`, `delete()`, `undelete()`, `update()`, and `upsert()` calls.

Note: The default behavior means that client applications may need to handle some failures: for example, if you create an opportunity that has shipments (a custom object), and the opportunity line item gets created but the shipment creation fails, if your business rules required all opportunities be created with shipment, your client application would need to roll back the opportunity creation. The easiest way to do this is to use AllOrNoneHeader.

Factors that Affect Data Access

When using the API, the following factors affect access to your organization's data:

Access

Your organization must be enabled for API access.

Objects may not be available until you contact Salesforce and request access. For example, Territory2 is visible only if Enterprise Territory Management has been enabled in the application. Such requirements are in the "Usage" section for each object.

Sometimes a feature must be used once before objects related to it can be accessed with the API. For example, the `recordTypeIds` is available only after at least one record type has been created for your organization in the user interface.

To investigate data access issues, you can start by inspecting the WSDL:

- **Enterprise WSDL**: The generated enterprise WSDL file contains all of the objects that are available to your organization. By using the API, a client application can access objects that are defined in your enterprise WSDL file.
- **Partner WSDL**: When using the generated partner WSDL file, a client application can access objects that are returned in the `describeGlobal()` call.

Object-Level and Field-Level Security

The API respects object-level and field-level security configured in the user interface. You can access objects and fields only if the logged-in user's permissions and access settings allow such access. For example, fields that are not visible to a given user are not returned in a `query()` or `describeSObjects()` call. Similarly, read-only fields can't be updated.

User Permissions

A user attempting to access the API must have the permission "API Enabled" selected. It's selected by default.

Your client application logs in as a user called a *logged-in* user. The logged-in user's permissions grant or deny access to specific objects and fields in your organization:

- **Read**—Users can only view objects of this type.
- **Create**—Users can read and create objects of this type.
- **Edit**—Users can read and update objects of this type.
- **Delete**—Users can read, edit, and delete objects of this type.

User permissions do not affect field-level security. If field-level security specifies that a field is hidden, users with "Read" on that object can view only those fields that are not hidden on the record. In addition, users with "Read" on an object can view only those records that sharing settings allow. The one exception is the "Edit Read Only Fields" permission, which gives users the ability to edit fields marked as read only via field-level security.

Sharing

For most API calls, data that is outside of the logged-in user's sharing model is not returned. Users are granted the most permissive access that is available to them, either through organization-wide defaults or manual record sharing, just as in the application.

User Permissions that Override Sharing

- **View All**—Users can view all records associated with this object, regardless of sharing settings.
- **Modify All**—Users can read, edit, delete, transfer, and approve all records associated with this object, regardless of sharing settings.
- **Modify All Data**—users can read, edit, delete, transfer, and approve all records regardless of sharing settings. This permission is not an object-level permission, unlike "View All" and "Modify All."

To protect the security of your data, give the logged-in user only the permissions needed to successfully execute all the calls made by the application. For large integration applications, "Modify All Data" may speed up call response times. If you are loading a large number of records, use the Bulk API instead.

Related Objects

Some objects depend on other objects for permission. For example, AccountTeamMember follows sharing on the associated permission-assigned object such as the Account record. Similarly, a Partner depends on the permissions in the associated .

Ownership changes to a record do not automatically cascade to related records. For example, if ownership changes for a given Account, ownership does not then automatically change for any Contract associated with that Account—each ownership change must be made separately and explicitly by the client application.

Object Properties

To create an object with the `create()` call, the object's `createable` attribute must be set to `true`. To determine what operations are allowed on a given object, your client application can invoke the `describeSObjects()` call on the object and inspect the properties in the DescribeSObjectResult.

Note: `replicatable` allows `getUpdated()` and `getDeleted()` calls.

Page Layouts and Record Types

Requirements defined in the Salesforce user interface for page layouts and record types are not enforced by the API:

- Page layouts can specify whether a given field is required, but the API does not enforce such layout-specific field restrictions or validations in `create()` and `update()` calls. It's up to the client application to enforce any such constraints, if applicable.
- Record types can control which picklist values can be chosen in a given record and which page layouts users with different profiles can see. However, such rules that are configured and enforced in the user interface are not enforced in the API. For example, the API does not validate whether the value in a picklist field is allowed per any record type restrictions associated with the profile of the logged-in user. Similarly, the API does not prevent a client application from adding data to a particular field simply because that field does not appear in a layout associated with the profile of the logged-in user.

Referential Integrity

To ensure referential integrity, the API forces or prevents certain behaviors:

- ID values in reference fields are validated in `create()` and `update()` calls.

- If a client application deletes a record, then its children are automatically deleted as part of the call if the `cascadeDelete` property on ChildRelationship for that child has a value of `true`. For example, if a client application deletes an Opportunity, then any associated OpportunityLineItem records are also deleted. However, if an OpportunityLineItem is not deletable or is currently being used, then deletion of the parent Opportunity fails. For example, if a client application deletes an Invoice_Statement, then any associated Line_Item records are also deleted. However, if a Line_Item is not deletable or is currently being used, then deletion of the parent Invoice_Statement fails. Use DescribeSObjectResult to view the ChildRelationship value if you want to be sure what will be deleted.

  There are certain exceptions that prevent the execution of a `cascadeDelete`. For example, you can't delete an account if it has associated cases, if it has related opportunities that are owned by other users, or if associated contacts are enabled for the Customer Portal. In addition, if you attempt to delete an account that has closed/won opportunities owned by you or has active contracts, then the delete request for that record will fail.

Package Version Settings

When your API client is referencing components in managed packages, you can specify the version of each installed package that you want to reference for your integration. This allows your API client to continue to function with specific, known behavior even when you install subsequent versions of a package. You can use the PackageVersionHeader SOAP header to set different package versions for different calls, if necessary.

A package version is a number that identifies the set of components uploaded in a package. The version number has the format *`majorNumber.minorNumber.patchNumber`* (for example, 2.1.3). The major and minor numbers increase to a chosen value during every major release. The *`patchNumber`* is generated and updated only for a patch release. Publishers can use package versions to evolve the components in their managed packages gracefully by releasing subsequent package versions without breaking existing customer integrations using the package.

Default package versions for API calls provide fallback settings if package versions are not provided by an API call. Many API clients do not include package version information, so the default settings maintain existing behavior for these clients.

You can specify the default package versions for enterprise API and partner API calls. The enterprise WSDL is for customers who want to build an integration with their Salesforce organization only. It is strongly typed, which means that calls operate on objects and fields with specific data types, such as `int` and `string`. The partner WSDL is for customers, partners, and ISVs who want to build an integration that can work across multiple Salesforce organizations, regardless of their custom objects or fields. It is loosely typed, which means that calls operate on name-value pairs of field names and values instead of specific data types.

You must associate the enterprise WSDL with specific package versions to maintain existing behavior for clients. There are options for setting the package version bindings for an API call from client applications using either the enterprise or partner WSDL. The package version information for API calls issued from a client application based on the enterprise WSDL is determined by the first match in the following settings.

1. The PackageVersionHeader SOAP header.
2. The SOAP endpoint contains a URL with a format of *`serverName`*`/services/Soap/c/`*`api_version`*`/`*`ID`* where *`api_version`* is the version of the API, such as , and *`ID`* encodes your package version selections when the enterprise WSDL was generated.
3. The default enterprise package version settings.

The partner WSDL is more flexible as it is used for integration with multiple organizations. If you choose the Not Specified option for a package version when configuring the default partner package versions, the behavior is defined by the latest installed package version. This means that behavior of package components, such as an Apex trigger, could change when a package is upgraded and that change would immediately impact the integration. Subscribers may want to select a specific version for an installed package for all partner API calls from client applications to ensure that subsequent installations of package versions do not affect their existing integrations.

The package version information for partner API calls is determined by the first match in the following settings.

1. The PackageVersionHeader SOAP header.
2. An API call from a Visualforce page uses the package versions set for the Visualforce page.
3. The default partner package version settings.

To configure default package versions for API calls:

1. From Setup, enter `API` in the `Quick Find` box, then select **API**.
2. Click **Configure Enterprise Package Version Settings** or **Configure Partner Package Version Settings**. These links are only available if you have at least one managed package installed in your organization.
3. Select a `Package Version` for each of your installed managed packages. If you are unsure which package version to select, you should leave the default selection.
4. Click **Save**.

Note: Installing a new version of a package in your organization does not affect the current default settings.

CHAPTER 4 Error Handling

In this chapter ...

The API calls return error data that your client application can use to identify and resolve runtime errors. If an error occurs during the invocation of most API calls, then the API provides the following types of error handling:

- For errors resulting from badly formed messages, failed authentication, or similar problems, the API returns a SOAP fault message with an associated ExceptionCode.
- For most calls, if the error occurs because of a problem specific to the query, the API returns an Error. For example, if a `create()` request contains more than 200 objects.

Error Handling for Session Expiration

When you sign on via the `login()` call, a new client session begins and a corresponding unique session ID is generated. Sessions expire automatically after a predetermined length of inactivity, which can be configured in Salesforce from Setup by clicking **Security Controls**. The default is 120 minutes (two hours). If you make an API call, the inactivity timer is reset to zero.

When your session expires, the exception code INVALID_SESSION_ID is returned. If this happens, you must invoke the `login()` call again.

More About Error Handling

For more information about errors, see the following topics:

- API Fault Element
- ExceptionCode
- Error

CHAPTER 5 Security and the API

In this chapter ...

Client apps that access your Salesforce data are subject to the same security protections that are used in the Salesforce user interface. Additional protection is available for orgs that install AppExchange managed packages if those packages contain components that access Salesforce via the API.

User Authentication

Client apps must log in using valid credentials. After validating, the server provides the client app with a:

- `sessionId` that is set into the session header so that all subsequent calls to the Web service are authenticated
- URL address (`serverUrl`) for the client app's web service requests

Salesforce supports only the Transport Layer Security (TLS) protocol and frontdoor.jsp. Ciphers must have a key length of at least 128 bits.

User Profile and Permission Sets Configuration

As an org's Salesforce admin, you control which features and views are available to users by configuring profiles and permission sets and assigning users to them. To access the API to issue calls and receive the call results, a user must have the API Enabled permission. Client apps can query or update only those objects and fields to which they have access via the permissions of the logged-in user.

To create, edit, or delete a profile, from Setup, enter *`Profiles`* in the Quick Find box, then select **Profiles**. To create, edit, or delete a permission set, from Setup, enter *`Permission Sets`* in the Quick Find box, then select **Permission Sets**.

Note: The web services WSDL files return all available objects and fields for an org.

Security Token

When users log in to Salesforce via the user interface, the API, or a desktop client such as Salesforce for Outlook, Connect Offline, Connect for Office, or the Data Loader, Salesforce authorizes the login as follows.

1. Salesforce checks whether the user's profile has login-hour restrictions. If the user's profile specifies login-hour restrictions, login attempts outside the specified hours are denied.
2. If the user has the Multi-Factor Authentication for User Interface Logins permission, the Salesforce login process prompts the user for an identity verification method in addition to their username and password. If the user's account isn't already connected to a verification method, such as the Salesforce Authenticator mobile app, Salesforce prompts the user to register a method.
3. If the user has the Multi-Factor Authentication for API Logins permission and connected an authenticator app to the account, the user must enter a verification code (TOTP) generated by the authenticator app. If the user uses the standard security token, Salesforce returns an error.
4. Salesforce then checks whether the user's profile defines IP address range restrictions. If so, logins from outside the IP address range are denied. If the **Enforce login IP ranges on every request** session setting is enabled, the IP address restrictions are enforced for each page request, including requests from client apps.
5. If profile-based IP address restrictions aren't set, Salesforce checks whether the user is logging in from a device that was previously used to access Salesforce.
   - If the user is logging in from a device and browser that Salesforce recognizes, the login is allowed.
   - If the user is logging in from an IP address on your org's trusted IP address list, the login is allowed.
   - If the user isn't logging in from a trusted IP address, device, or browser that Salesforce recognizes, the login is blocked.

Whenever a login is blocked or returns an API login fault, Salesforce verifies the user's identity.

- For access via the user interface, the user is prompted to verify using Salesforce Authenticator (version 2 or later) or enter a verification code.

Note: Users aren't asked for a verification code the first time they log in to Salesforce.

- For access via the API or client app, if the Multi-Factor Authentication on API Logins permission is set on the user profile, users enter a TOTP verification code generated by an authenticator app.

  If the permission isn't set, users must add their security token to the end of their password to log in. A security token is a generated key from Salesforce. For example, if a user's password is *mypassword* and the security token is *XXXXXXXXXX*, the user enters *mypasswordXXXXXXXXXX* to log in. Some client apps have a separate field for the security token.

  Users can get their security token by changing their password or resetting their security token via the Salesforce user interface. When a user changes a password or resets a security token, Salesforce sends a new security token to the email address on the user's Salesforce record. The security token is valid until the user resets the security token, changes a password, or has a password reset.

  Tip: Before you access Salesforce from a new IP address, we recommend that you get your security token from a trusted network using **Reset My Security Token**.

For more information about tokens, see Reset Your Security Token in Salesforce Help.

When a user's password is changed, the user's security token is automatically reset. To log in after the reset, the user adds the generated security token to the end of the password. Or the user enters the new password after you add the user's IP address to the org's list of trusted IP addresses.

If single sign-on (SSO) is enabled, users who access the API or a desktop client can't log in unless their IP address is included on your org's list of trusted IP addresses or on their profile, if their profile has IP address restrictions set. The delegated authentication authority usually handles login lockout policies for users with the Uses Single Sign-On permission. However, if the security token is enabled, your login lockout settings determine how many times a user can try to log in with an invalid security token before getting locked out. For more information, see Setting Login Restrictions and Setting Password Policies in Salesforce Help.

Sharing

Sharing refers to the act of granting read or write access to a user or group so that they can view or edit a record owned by other users, if the default access levels don't permit such access. All API calls respect the sharing model.

The following table describes the types of access levels.

API Value	Salesforce User Interface Label	API Picklist Label	Description
`None`	`Private`	`Private`	Only the record owner and Users above that role in the hierarchy can view and edit the record.
`Read`	`Read Only`	`Read Only`	All Users and Groups can view the record but not edit it. Only the owner and users above that role in the hierarchy can edit the record.
`Edit`	`Read/Write`	`Read/Write`	All Users and Groups can view and edit the record.
`ReadEditTransfer`	`Read/Write/Transfer`	`Read/Write/Transfer`	All Users and Groups can view, edit, delete, and transfer the record. (Only available for cases and leads as an org-wide default setting.)
`All`	`Full Access`	`Owner`	All Users and Groups can view, edit, transfer, delete, and share the record. (Only available for campaigns as an org-wide default setting.)

API Value	Salesforce User Interface Label	API Picklist Label	Description
ControlledByParent	Controlled by Parent	Controlled By Parent	(Contacts only.) All Users and Groups can perform an action (such as view, edit, or delete) on the contact based on whether he or she can perform that same action on the record associated with it.

Not all access levels are available for every object. See the Fields table for each object to learn which access levels are available, as well as other sharing details specific to that object.

For more information about sharing in general, see Salesforce Help.

Note: In the API, you can create and update objects such as AccountShare and OpportunityShare that define sharing entries for records.

Implicit Restrictions for Objects and Fields

Certain objects can be created or deleted only in the Salesforce user interface. Other objects are read-only—client apps cannot create(), delete(), or update() such objects. Similarly, certain fields within some objects can be specified on create() but not on update(). Other fields are read-only—client apps cannot specify field values in create() or update() calls. For more information, see the respective object descriptions in Object Basics.

API Access in Salesforce AppExchange Packages

The API allows access to objects and calls based on the permissions of the user who logs into the API. To prevent security issues from arising when installed packages have components that access data via the API, Salesforce provides additional security:

- When a developer creates an AppExchange package with components that access the API, the developer can restrict the API access for those components.
- When an administrator installs an AppExchange package, the administrator can accept or reject the access. Rejecting the access cancels the installation.
- After an administrator installs a package, the administrator can restrict the API access of components in the package that access the API.

Editing API access for a package is done in the Salesforce user interface. For more information, see *Manage API and Dynamic Apex Access in Packages* in Salesforce Help.

API access for a package affects the API requests originating from components within the package; it determines the objects that the API requests can access. If the API access for a package is not defined, then the objects that the API requests have access to are determined by the user's permissions.

The API access for a package never allows users to do more than the permissions granted to the user. API access in a package only reduces what the user's permissions allow.

Choosing `Restricted` for the `API Access` setting in a package affects the following:

- API access in a package overrides the following user permissions:
  - Author Apex
  - Customize Application

  - Edit HTML Templates
  - Edit Read Only Fields
  - Manage Billing
  - Manage Call Centers
  - Manage Categories
  - Manage Custom Report Types
  - Manage Dashboards
  - Manage Letterheads
  - Manage Package Licenses
  - Manage Public Documents
  - Manage Public List Views
  - Manage Public Reports
  - Manage Public Templates
  - Manage Users
  - Transfer Record
  - Use Team Reassignment Wizards
  - View Setup and Configuration
  - Weekly Export Data
- If `Read`, `Create`, `Edit`, and `Delete` access are not selected in the API access setting for objects, users do not have access to those objects from the package components, even if the user has the "Modify All Data" and "View All Data" permissions.
- A package with `Restricted` API access can't create new users.
- Salesforce denies access to Web service and `executeanonymous` requests from an AppExchange package that has `Restricted` access.

The following considerations also apply to API access in packages:

- Workflow rules and Apex triggers fire regardless of API access in a package.
- If a component is in more than one package in an organization, API access is unrestricted for that component in all packages in the organization regardless of the access setting.
- If Salesforce introduces a new standard object after you select restricted access for a package, access to the new standard object is not granted by default. You must modify the restricted access setting to include the new standard object.
- When you upgrade a package, changes to the API access are ignored even if the developer specified them. This ensures that the administrator installing the upgrade has full control. Installers should carefully examine the changes in package access in each upgrade during installation and note all acceptable changes. Then, because those changes are ignored, the administrator should manually apply any acceptable changes after installing an upgrade.
- S-controls are served by Salesforce and rendered inline in Salesforce. Because of this tight integration, there are several means by which an s-control in an installed package could escalate its privileges to the user's full privileges. In order to protect the security of organizations that install packages, s-controls have the following limitations:
  - For packages you are developing (that is, not installed from AppExchange), you can only add s-controls to packages with the default `Unrestricted` API access. Once a package has an s-control, you cannot enable `Restricted` API access.
  - For packages you have installed, you can enable access restrictions even if the package contains s-controls. However, access restrictions provide only limited protection for s-controls. Salesforce recommends that you understand the JavaScript in an s-control before relying on access restriction for s-control security.

- If an installed package has `Restricted` API access, upgrades will be successful only if the upgraded version does not contain any s-controls. If s-controls are present in the upgraded version, you must change the currently installed package to `Unrestricted` API access.

To manage API access to packages, see “Manage API and Dynamic Apex Access in Packages” in Salesforce Help.

Note: XML-RPC requests that originate from restricted packages are denied access.

Outbound Port Restrictions

For security reasons, Salesforce restricts the outbound ports you can specify to one of the following:

- 80: This port only accepts HTTP connections.
- 443: This port only accepts HTTPS connections.
- 1024–66535 (inclusive): These ports accept HTTP or HTTPS connections.

The port restriction applies to any feature where a port is specified, for example outbound messages, AJAX proxy, or single-sign on.

CHAPTER 6 Using the Partner WSDL

In this chapter ...

The API provides two WSDLs to choose from:

- **Enterprise Web Services WSDL**—Used by enterprise developers to build client applications for a single Salesforce organization. The enterprise WSDL is strongly typed, which means that it contains objects and fields with specific data types, such as `int` and `string`. Customers who use the enterprise WSDL document must download and re-consume it when changes are made to the custom objects or fields in their org or when they want to use a different version of the API. To access the current WSDL for your organization, log in to your Salesforce organization and from Setup, enter *API* in the `Quick Find` box. Then, on the API page, select **Generate Enterprise WSDL**.
- **Partner Web Services WSDL**—Used for client applications that are metadata-driven and dynamic in nature. It is particularly—but not exclusively—useful to Salesforce partners who are building client applications for multiple organizations. As a loosely typed representation of the Salesforce data model that works with name-value pairs of field names and values instead of specific data types, it can be used to access data within any organization. This WSDL is most appropriate for developers of clients that can issue a query call to get information about an object before the client acts on the object. The partner WSDL document needs to be downloaded and consumed only once per version of the API. To access the current WSDL for your organization, log in to your Salesforce organization and from Setup, enter *API* in the `Quick Find` box. Then, on the API page, select **Generate Partner WSDL**.

In general, the enterprise WSDL is more straightforward to use, while the partner WSDL is more flexible and dynamically adaptable to different organizations, allowing you to write a single application that can be used for multiple users and multiple organizations.

High Precision Versions

If you require higher precision than the regular WSDLs provide, ask your account team about the "High Precision API" feature. When this feature is enabled, the WSDLs that you download (both Enterprise and Partner) use higher precision data types. For example, this feature is useful if your organization uses complex numerical formulas that are prone to rounding errors.

Note: This feature is a limited pilot and is not currently a generally available feature.

If you have been using the regular version of the WSDL and change to the high precision version, perform the following checks:

1. Download the new WSDL.
2. Regenerate the stub code. (See Setting Up Your Java Developer Environment.)
3. Verify that the type of variables used to store numeric values in your code can accommodate the new types.

Obtaining the Partner WSDL File

To use the partner WSDL, download a copy of the file using either of the following methods:

- Obtain it from your organization's Salesforce administrator, or
- Generate from Setup in Salesforce (enter `API` in the `Quick Find` box, then select **API**) according to the instructions in Step 2: Generate or Obtain the Web Service WSDL.

While the enterprise WSDL file needs to be regenerated whenever custom fields or custom objects are added to an organization's Salesforce information, the partner WSDL file remains the same regardless of underlying changes in the organization's Salesforce data.

Calls and the Partner WSDL

The partner WSDL file defines exactly the same API calls found in the enterprise WSDL file. A client application using the partner WSDL will likely use the following API calls to determine an organization's metadata:

Task / Call	Description
`describeGlobal()`	Retrieves a list of available objects for your organization's data.
`describeLayout()`	Retrieves metadata about page layouts for the specified object type.
`describeSObject()`	`describeSObject()` has been superseded by `describeSObjects()`.
`describeSObjects()`	Use to obtain metadata for a given object. You can first call to retrieve a list of all objects for your organization, then iterate through the list and use to obtain metadata about individual objects.
`describeTabs()`	In the user interface, users have access to standard apps (and may also have access to custom apps) as listed in the Lightning Platform app menu at the top of the page. Selecting a standard app or custom app in the user interface allows the user to switch between the listed apps at any time.

To explore an organization's metadata, a client application can:

1. Call `describeGlobal()` to obtain a list of available objects.
2. In the returned DescribeGlobalResult object, retrieve an array of DescribeGlobalSObjectResult objects by calling `sobjects`.
3. Get the sObject type name for each returned sObject by calling `name` on the DescribeGlobalSObjectResult objects.
4. The DescribeGlobalSObjectResult object provides some metadata about the sObject, such as whether the sObject is createable or updateable. If you want to get more information about particular sObjects, like their fields and child relationships, call `describeSObjects()` by passing it an array of the sObject type names that you're interested in obtaining more information about.

sObject Reference Reuse

An sObject reference can't be reused within a single operation.

Use a different reference. For example, the following code snippet creates an account and contact with a custom field and an event using two different references:

```
SObject account = new com.sforce.soap.partner.sobject.wsc.SObject();
    account.setType("Account");
```

```
account.setField("Name","myAccount");
account.setField("XID1__c", "1");
SObject refAcc1 = new com.sforce.soap.partner.sobject.wsc.SObject();
refAcc1.setType("Account");
refAcc1.setField("XID1__c", "1");
SObject refAcc2 = new com.sforce.soap.partner.sobject.wsc.SObject();
refAcc2.setType("Account");
refAcc2.setField("XID1__c", "1");

SObject contact = new com.sforce.soap.partner.sobject.wsc.SObject();
contact.setType("Contact");
contact.setField("LastName", "LName");
contact.setField( "XID2__c", "2");
contact.setField( "Account", refAcc1);
SObject refCon = new com.sforce.soap.partner.sobject.wsc.SObject();
contact.setType("Contact");
contact.setField( "XID2__c", "2");


SObject event = new com.sforce.soap.partner.sobject.wsc.SObject();
contact.setType("Event");
contact.setField("Subject", "myEvent");
contact.setField( "ActivityDateTime", Calendar.getInstance());
contact.setField("DurationInMinutes", 60);
contact.setField("Who", refCon);
contact.setField("What", refAcc2);

client.create(new SObject[] { account, contact, event}); // exception thrown here
```

Any call that takes a parameter of the form `sObject[] sObjects` is subject to this limitation.

Objects, Fields, and Field Data and the Partner WSDL

The enterprise WSDL file defines all the specific objects (such as Account and Contact) in a Salesforce org. In contrast, the partner WSDL file defines a single, generic object (sObject) that represents all the objects. For a particular object, its type is defined in the `name` field in the returned DescribeSObjectResult.

With the partner WSDL, your client application code handles fields as arrays of name-value pairs that represent the field data. When referring to the name of an individual field, use the value in its `name` field of the Field type in the DescribeSObjectResult.

Languages vary in the way they handle name-value pairs and map typed values to the primitive XML data types defined in SOAP messages. With the enterprise WSDL, the mapping is handled implicitly. With the partner WSDL, however, you manually manage values and data types when building client applications. Specify the object type before you assign field values. When specifying the value of a particular field, use a value that is valid for the field (range, format, and data type). Make sure that you understand the mapping between data types in your programming language and XML primitive data types. See SOAPType for more information.

Queries and the Partner WSDL

When using the `query()` call with the partner WSDL, consider the following guidelines:

- The queryString parameter is case-insensitive. The API will accept field names in the *fieldList* using any combination of uppercase and lowercase letters. However, in the QueryResult, the case of field names (both predefined and custom fields) will match exactly the value in the `name` field of the Field type in the DescribeSObjectResult. It is recommended that you use the proper case when specifying fields in the *fieldList*.

- For the partner WSDL, the ordering of fields in the QueryResult is determined by the field order in the *fieldList*, not the field order in the WSDL file.
- The *fieldList* cannot contain duplicate field names. For example:
  - Invalid (returns an error): `"SELECT Firstname, Lastname, Firstname FROM User"`
  - Valid: `"SELECT Firstname, Lastname FROM User"`
- The QueryResult always contains all of the fields specified in the *fieldList*, even if some of the fields contain no data (`null`). Although SOAP allows you to omit fields that contain no values in the result set, the API always returns an array containing all fields.
- If you use the partner WSDL, a query that includes ID will return the ID field twice in the SOAP XML response data. Similarly, a query that does not include ID will return a single null ID field in the SOAP XML response data. For example, a query for `SELECT ID, FirstName, LastName FROM Contact` might return a SOAP XML response with records like:

```
<records xsi:type="sf:sObject" xmlns="urn:partner.soap.sforce.com">
    <sf:type>Contact</sf:type>
    <sf:Id>0038000000FrjoBQRW</sf:Id>
    <sf:Id>0038000000FrjoBQRW</sf:Id>
    <sf:FirstName>John</sf:FirstName>
    <sf:LastName>Smith</sf:LastName>
</records>
```

  This is expected behavior and something to be aware of if you are accessing the full SOAP XML response data and not using WSC to access the web service response.

Namespaces in the Partner WSDL

In XML, every tag has a defined namespace. In the `enterprise.wsdl`, namespaces are handled implicitly. When using API calls with the partner WSDL, however, you need to explicitly specify the correct namespaces for API calls, objects, and fields, and faults. This rule applies to predefined and custom objects and fields.

For	Namespace
API Calls	`urn:partner.soap.sforce.com`
sObjects	`urn:sobject.partner.soap.sforce.com`
Fields	`urn:sobject.partner.soap.sforce.com`
Faults	`urn:fault.partner.soap.sforce.com`

Package Versions and the Partner WSDL

The partner WSDL is loosely typed. This makes it more flexible for partners who want to integrate with multiple organizations. Default package versions for API calls provide fallback settings if package versions are not provided by an API call.

The behavior of a package in partner API calls is defined by the latest installed package version if the default value (`Not Specified`) is selected for the installed package. This means that behavior of package components, such as an Apex trigger, could change when a package is upgraded and that change would immediately impact the integration. Subscribers may want to select a specific version for an installed package for all partner API calls from client applications to ensure that subsequent installations of package versions do not affect their existing integrations.

An API client developer should communicate with the administrator of the default partner package version settings if these are two different roles in your organization and the developer recommends changing the settings. Alternatively, an API client developer can set the package versions in the PackageVersionHeader SOAP header for the client.

A partner that is developing a package that references another package should always supply version information for the base package in their partner API calls. This ensures that the extension package is not affected by a component being deprecated in the base package.

The package version information for partner API calls is determined by the first match in the following settings.

1. The PackageVersionHeader SOAP header.
2. An API call from a Visualforce page uses the package versions set for the Visualforce page.
3. The default partner package version settings.

To configure default package versions for API calls with the partner WSDL, see Package Version Settings.

User Interface Themes

EDITIONS

Available in: Salesforce Classic and earlier

Back in the Winter '06 release, Salesforce started supporting multiple user interface themes, allowing you to use different sets of icons and colors for the user interface. But these user interface themes do not apply when your org is using Lightning Experience.

Two user interface themes match the earlier iterations of Salesforce.

- Theme3—The "Salesforce Classic 2010 user interface theme." This interface was previously referred to as "Salesforce" or "new user interface theme." You might also be familiar with it as the Salesforce *Aloha* interface.
- Theme2—The "Salesforce Classic 2005 user interface theme." This interface was previously referred to as "Salesforce Classic" or the "classic user interface theme."

The `getUserInfo()` call returns a `getUserInfoResult` object, which includes the `userUiSkin` property. This property informs you of the user's current user interface theme.

Use the `describeQuickActions()`, `describeTabs()`, and `describeTheme()` calls and their return types to get information on theme icons and colors.

Style sheets are available to mimic the look and feel of the older user interfaces. For more information, see Styling Visualforce Pages in the *Visualforce Developer's Guide*. But if you're planning to switch to Lightning Experience, consider the Lightning Component framework, our new UI framework. See the "Lightning Components" module in the Develop for Lightning Experience Trailhead trail to learn more.

Examples Using the Partner WSDL

This section includes examples in Java and C# for making API calls using the partner WSDL. Before running these samples, perform the following steps in the quick start tutorial to get the partner WSDL file and generate the proxy client code for your development environment.

- Step 2: Generate or Obtain the Web Service WSDL
- Step 3: Import the WSDL File Into Your Development Platform

After you generate the proxy client code and set up your development environment, you can start writing your client application. First, your application needs to log into the Salesforce service using the partner authentication endpoint. After a successful login, you can execute the sample methods.

For your convenience, template classes are provided, one in Java and one in C#, that make a login call. You can use them to execute the sample methods provided later in this section.

Sample template class for Java: This sample prompts the user to enter the username, password, and authentication endpoint. Next, it logs the user in. For the authentication endpoint URL, pass in the endpoint found in the partner WSDL file.

```
import com.sforce.soap.partner.PartnerConnection;
import com.sforce.soap.partner.sobject.*;
import com.sforce.soap.partner.*;
import com.sforce.ws.ConnectorConfig;
import com.sforce.ws.ConnectionException;
import com.sforce.soap.partner.Error;
import java.io.FileNotFoundException;
import java.io.IOException;
import java.io.InputStreamReader;
import java.io.BufferedReader;
import java.util.*;

public class PartnerSamples {
    PartnerConnection partnerConnection = null;
    private static BufferedReader reader =
        new BufferedReader(new InputStreamReader(System.in));

    public static void main(String[] args) {
        PartnerSamples samples = new PartnerSamples();
        if (samples.login()) {
            // Add calls to the methods in this class.
            // For example:
            // samples.querySample();
        }
    }

    private String getUserInput(String prompt) {
        String result = "";
        try {
          System.out.print(prompt);
          result = reader.readLine();
        } catch (IOException ioe) {
          ioe.printStackTrace();
        }
        return result;
    }

    private boolean login() {
        boolean success = false;
        String username = getUserInput("Enter username: ");
        String password = getUserInput("Enter password: ");
        String authEndPoint = getUserInput("Enter auth end point: ");

        try {
          ConnectorConfig config = new ConnectorConfig();
          config.setUsername(username);
          config.setPassword(password);

          config.setAuthEndpoint(authEndPoint);
```

```
          config.setTraceFile("traceLogs.txt");
          config.setTraceMessage(true);
          config.setPrettyPrintXml(true);

          partnerConnection = new PartnerConnection(config);

          success = true;
        } catch (ConnectionException ce) {
          ce.printStackTrace();
        } catch (FileNotFoundException fnfe) {
          fnfe.printStackTrace();
        }

        return success;
      }

    //
    // Add your methods here.
    //
}
```

Sample template class for C#: This sample prompts the user to enter the username and password. Next, it logs the user in. The project name for this sample is assumed to be *TemplatePartner* and the Web reference name *sforce*. If these values are different for your project, make sure to change the using directive to appropriate values for your project: `using your_project_name.web_reference_name;`.

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Web.Services.Protocols;
using System.Collections;
using TemplatePartner.sforce;

namespace TemplatePartner
{
    class PartnerSamples
    {
        private SforceService binding;

        static void Main(string[] args)
        {
            PartnerSamples samples = new PartnerSamples();
            if (samples.login())
            {
            // Add calls to the methods in this class.
            // For example:
            // samples.querySample();
            }
        }

        private bool login()
        {
            Console.Write("Enter username: ");
```

```
string username = Console.ReadLine();
Console.Write("Enter password: ");
string password = Console.ReadLine();

// Create a service object
binding = new SforceService();

// Timeout after a minute
binding.Timeout = 60000;

// Try logging in
LoginResult lr;
try
{

    Console.WriteLine("\nLogging in...\n");
    lr = binding.login(username, password);
}

// ApiFault is a proxy stub generated from the WSDL contract when
// the web service was imported
catch (SoapException e)
{
    // Write the fault code to the console
    Console.WriteLine(e.Code);

    // Write the fault message to the console
    Console.WriteLine("An unexpected error has occurred: " + e.Message);

    // Write the stack trace to the console
    Console.WriteLine(e.StackTrace);

    // Return False to indicate that the login was not successful
    return false;
}

// Check if the password has expired
if (lr.passwordExpired)
{
    Console.WriteLine("An error has occurred. Your password has expired.");
    return false;
}

// Set the returned service endpoint URL
binding.Url = lr.serverUrl;

// Set the SOAP header with the session ID returned by
// the login result. This will be included in all
// API calls.
binding.SessionHeaderValue = new SessionHeader();
binding.SessionHeaderValue.sessionId = lr.sessionId;

// Return true to indicate that we are logged in, pointed
// at the right URL and have our security token in place.
```

```
            return true;
        }

    //
    // Add your methods here.
    //
}
```

This partner WSDL samples are:

- Sample query and queryMore Calls
- Sample search Call
- Sample create Call
- Sample update Call

Sample query and queryMore Calls

The following Java and C# examples show usage of the `query()` and `queryMore()` calls for the partner WSDL. Each example sets the batch size of the query to 250 items returned. It then performs a query call to get the first name and last name of all contacts and iterates through the contact records returned. For each contact, it writes the contact's first name and last name to the output, or only the last name if the first name is null. Finally, if there are more items to be returned by the query, as indicated by a `QueryResult.done` property value of `false`, it calls `queryMore()` to get the next batch of items, and repeats the process until no more records are returned.

To execute the sample method, you can use the corresponding Java or C# template class provided in Examples Using the Partner WSDL.

Java Example

```
public void querySample() {
    try {
        // Set query batch size
        partnerConnection.setQueryOptions(250);

        // SOQL query to use
        String soqlQuery = "SELECT FirstName, LastName FROM Contact";
        // Make the query call and get the query results
        QueryResult qr = partnerConnection.query(soqlQuery);

        boolean done = false;
        int loopCount = 0;
        // Loop through the batches of returned results
        while (!done) {
            System.out.println("Records in results set " + loopCount++
                    + " - ");
            SObject[] records = qr.getRecords();
            // Process the query results
            for (int i = 0; i < records.length; i++) {
                SObject contact = records[i];
                Object firstName = contact.getField("FirstName");
                Object lastName = contact.getField("LastName");
                if (firstName == null) {
                    System.out.println("Contact " + (i + 1) +
```

```
                            ": " + lastName
                    );
                } else {
                    System.out.println("Contact " + (i + 1) + ": " +
                            firstName + " " + lastName);
                }
            }
            if (qr.isDone()) {
                done = true;
            } else {
                qr = partnerConnection.queryMore(qr.getQueryLocator());
            }
        }
    } catch(ConnectionException ce) {
        ce.printStackTrace();
    }
    System.out.println("\nQuery execution completed.");
}
```

C# Example

```
public void querySample()
{
    try
    {
        QueryResult qr = null;
        binding.QueryOptionsValue = new sforce.QueryOptions();
        binding.QueryOptionsValue.batchSize = 250;
        binding.QueryOptionsValue.batchSizeSpecified = true;

        qr = binding.query("SELECT FirstName, LastName FROM Contact");

        bool done = false;
        int loopCount = 0;
        while (!done)
        {
            Console.WriteLine("\nRecords in results set " +
                Convert.ToString(loopCount++)
                    + " - ");
            // Process the query results
            for (int i = 0; i < qr.records.Length; i++)
            {
                sforce.sObject con = qr.records[i];
                string fName = con.Any[0].InnerText;
                string lName = con.Any[1].InnerText;
                if (fName == null)
                    Console.WriteLine("Contact " + (i + 1) + ": " + lName);
                else
                    Console.WriteLine("Contact " + (i + 1) + ": " + fName
                        + " " + lName);
            }

            if (qr.done)
```

```
                done = true;
            else
                qr = binding.queryMore(qr.queryLocator);
        }
    }
    catch (SoapException e)
    {
        Console.WriteLine("An unexpected error has occurred: " + e.Message +
            " Stack trace: " + e.StackTrace);
    }
    Console.WriteLine("\nQuery execution completed.");
}
```

Sample search Call

The following Java and C# examples show how to use the `search()` call for the partner WSDL. Each example accepts a phone number string value that is used in the SOQL query. The search call looks for phone fields that match the passed in phone value in all contacts, leads, and accounts. Next, the example iterates through the returned search results that contain the matching records, adds them to arrays, and writes their field values to the console. The record fields returned correspond to the fields specified in the SOQL query for each record type.

To execute the sample method, you can use the corresponding Java or C# template class provided in Examples Using the Partner WSDL.

Java Example

```
public void searchSample(String phoneNumber) {
    try {
        // Example of phoneNumber format: 4155551212
        String soslQuery =
            "FIND {" + phoneNumber + "} IN Phone FIELDS " +
            "RETURNING " +
            "Contact(Id, Phone, FirstName, LastName), " +
            "Lead(Id, Phone, FirstName, LastName)," +
            "Account(Id, Phone, Name)";
        // Perform SOSL query
        SearchResult sResult = partnerConnection.search(soslQuery);
        // Get the records returned by the search result
        SearchRecord[] records = sResult.getSearchRecords();
        // Create lists of objects to hold search result records
        List<SObject> contacts = new ArrayList<SObject>();
        List<SObject> leads = new ArrayList<SObject>();
        List<SObject> accounts = new ArrayList<SObject>();

        // Iterate through the search result records
        // and store the records in their corresponding lists
        // based on record type.
        if (records != null && records.length > 0) {
          for (int i = 0; i < records.length; i++){
            SObject record = records[i].getRecord();
            if (record.getType().toLowerCase().equals("contact")) {
              contacts.add(record);
            } else if (record.getType().toLowerCase().equals("lead")){
```

```
            leads.add(record);
          } else if (record.getType().toLowerCase().equals("account")) {
            accounts.add(record);
          }
        }
        // Display the contacts that the search returned
        if (contacts.size() > 0) {
          System.out.println("Found " + contacts.size() +
              " contact(s):");
          for (SObject contact : contacts) {
            System.out.println(contact.getId() + " - " +
                contact.getField("FirstName") + " " +
                contact.getField("LastName") + " - " +
                contact.getField("Phone")
            );
          }
        }
        // Display the leads that the search returned
        if (leads.size() > 0) {
          System.out.println("Found " + leads.size() +
              " lead(s):");
          for (SObject lead : leads) {
            System.out.println(lead.getId() + " - " +
                lead.getField("FirstName") + " " +
                lead.getField("LastName") + " - " +
                lead.getField("Phone")
            );
          }
        }
        // Display the accounts that the search returned
        if (accounts.size() > 0) {
          System.out.println("Found " +
              accounts.size() + " account(s):");
          for (SObject account : accounts) {
            System.out.println(account.getId() + " - " +
                account.getField("Name") + " - " +
                account.getField("Phone")
            );
          }
        }
      } else {
        // The search returned no records
        System.out.println("No records were found for the search.");
      }
    } catch (ConnectionException ce) {
      ce.printStackTrace();
    }
}
```

C# Example

```
public void searchSample(String phoneNumber)
{
```

```
try
{
    // Example of phoneNumber format: 4155551212
    String soslQuery =
        "FIND {" + phoneNumber + "} IN Phone FIELDS " +
        "RETURNING " +
        "Contact(Id, Phone, FirstName, LastName), " +
        "Lead(Id, Phone, FirstName, LastName)," +
        "Account(Id, Phone, Name)";
    // Perform SOSL query
    SearchResult sResult = binding.search(soslQuery);
    // Get the records returned by the search result
    SearchRecord[] records = sResult.searchRecords;
    // Create lists of objects to hold search result records
    ArrayList contacts = new System.Collections.ArrayList();
    ArrayList leads = new System.Collections.ArrayList();
    ArrayList accounts = new System.Collections.ArrayList();

    // Iterate through the search result records
    // and store the records in their corresponding lists
    // based on record type.
    if ((records != null) && (records.Length > 0))
    {
        for (int i = 0; i < records.Length; i++)
        {
            sObject record = records[i].record;

            if (record.type.ToLower().Equals("contact"))
            {
                contacts.Add(record);
            }
            else if (record.type.ToLower().Equals("lead"))
            {
                leads.Add(record);
            }
            else if (record.type.ToLower().Equals("account"))
            {
                accounts.Add(record);
            }
        }
        // Display the contacts that the search returned
        if (contacts.Count > 0)
        {
            Console.WriteLine("Found " + contacts.Count + " contact(s):");
            for (int i = 0; i < contacts.Count; i++)
            {
                sObject c = (sObject)contacts[i];
                Console.WriteLine(c.Any[0].InnerText + " - " +
                            c.Any[2].InnerText + " " +
                            c.Any[3].InnerText + " - " + c.Any[1].InnerText);
            }
        }
        // Display the leads that the search returned
        if (leads.Count > 0)
```

```
            {
                Console.WriteLine("Found " + leads.Count + " lead(s):");
                for (int i = 0; i < leads.Count; i++)
                {
                    sObject l = (sObject)leads[i];
                    Console.WriteLine(l.Any[0].InnerText + " - " +
                                l.Any[2].InnerText + " " +
                                l.Any[3].InnerText + " - " + l.Any[1].InnerText);
                }
            }
            // Display the accounts that the search returned
            if (accounts.Count > 0)
            {
                Console.WriteLine("Found " + accounts.Count + " account(s):");
                for (int i = 0; i < accounts.Count; i++)
                {
                    sObject a = (sObject)accounts[i];
                    Console.WriteLine(a.Any[0].InnerText + " - " +
                                    a.Any[2].InnerText + " - " +
                                    a.Any[1].InnerText);
                }
            }
        }
        else
        {
            // The search returned no records
            Console.WriteLine("No records were found for the search.");
        }
    }
    catch (SoapException e)
    {
        Console.WriteLine("An unexpected error has occurred: " + e.Message +
            " Stack trace: " + e.StackTrace);
    }
}
```

Sample create Call

The following Java and C# examples show how to use the `create()` call for the partner WSDL. Each example creates a contact record with several fields. It iterates through the results of the create call and checks whether the operation was successful or not. If the create operation was successful, it writes the ID of the contact created to the console. Otherwise, it iterates through the errors and writes details of each error to the console. In this case, the output of the example is the ID of the new contact.

To execute the sample method, you can use the corresponding Java or C# template class provided in Examples Using the Partner WSDL.

Java Example

```
public String createSample() {
    String result = null;
    try {
        // Create a new sObject of type Contact
           // and fill out its fields.
        SObject contact = new SObject();
```

```
            contact.setType("Contact");
            contact.setField("FirstName", "Otto");
            contact.setField("LastName", "Jespersen");
            contact.setField("Salutation", "Professor");
            contact.setField("Phone", "(999) 555-1234");
            contact.setField("Title", "Philologist");

            // Add this sObject to an array
            SObject[] contacts = new SObject[1];
            contacts[0] = contact;
            // Make a create call and pass it the array of sObjects
            SaveResult[] results = partnerConnection.create(contacts);

            // Iterate through the results list
            // and write the ID of the new sObject
            // or the errors if the object creation failed.
            // In this case, we only have one result
            // since we created one contact.
            for (int j = 0; j < results.length; j++) {
                if (results[j].isSuccess()) {
                    result = results[j].getId();
                    System.out.println(
                        "\nA contact was created with an ID of: " + result
                    );
                 } else {
                    // There were errors during the create call,
                    // go through the errors array and write
                    // them to the console
                    for (int i = 0; i < results[j].getErrors().length; i++) {
                        Error err = results[j].getErrors()[i];
                        System.out.println("Errors were found on item " + j);
                        System.out.println("Error code: " +
                            err.getStatusCode().toString());
                        System.out.println("Error message: " + err.getMessage());
                    }
                 }
            }
        } catch (ConnectionException ce) {
            ce.printStackTrace();
        }
        return result;
}
```

C# Example

```
public void createSample()
{
    try
    {
        // Create a new sObject of type Contact
        // and fill out its fields.
        sObject contact = new sforce.sObject();
        System.Xml.XmlElement[] contactFields = new System.Xml.XmlElement[6];
```

```
        // Create the contact's fields
        System.Xml.XmlDocument doc = new System.Xml.XmlDocument();
        contactFields[0] = doc.CreateElement("FirstName");
        contactFields[0].InnerText = "Otto";
        contactFields[1] = doc.CreateElement("LastName");
        contactFields[1].InnerText = "Jespersen";
        contactFields[2] = doc.CreateElement("Salutation");
        contactFields[2].InnerText = "Professor";
        contactFields[3] = doc.CreateElement("Phone");
        contactFields[3].InnerText = "(999) 555-1234";
        contactFields[4] = doc.CreateElement("Title");
        contactFields[4].InnerText = "Philologist";

        contact.type = "Contact";
        contact.Any = contactFields;

        // Add this sObject to an array
        sObject[] contactList = new sObject[1];
        contactList[0] = contact;

        // Make a create call and pass it the array of sObjects
        SaveResult[] results = binding.create(contactList);
        // Iterate through the results list
        // and write the ID of the new sObject
        // or the errors if the object creation failed.
        // In this case, we only have one result
        // since we created one contact.
        for (int j = 0; j < results.Length; j++)
        {
            if (results[j].success)
            {
                Console.Write("\nA contact was created with an ID of: "
                                + results[j].id);
            }
            else
            {
                // There were errors during the create call,
                // go through the errors array and write
                // them to the console
                for (int i = 0; i < results[j].errors.Length; i++)
                {
                    Error err = results[j].errors[i];
                    Console.WriteLine("Errors were found on item " + j.ToString());
                    Console.WriteLine("Error code is: " + err.statusCode.ToString());
                    Console.WriteLine("Error message: " + err.message);
                }
            }
        }
    }
    catch (SoapException e)
    {
        Console.WriteLine("An unexpected error has occurred: " + e.Message +
            " Stack trace: " + e.StackTrace);
```

```
    }
}
```

Sample update Call

The following Java and C# examples show how to use the `update()` call for the Partner WSDL. Each example takes the ID of the contact to update as an argument. It creates two sObject records of type Contact—one to hold the valid passed in ID and the other has an invalid ID. Next, it sets a new phone number for the valid contact and `null` for the last name of the invalid contact. It then makes the update call and iterates through the results. For a successful update operation, it writes the ID of the contact that got updated. For a failed update operation, it writes the details of all returned errors to the console. In this case, the output is the ID of the contact that was successfully updated and an error for the invalid contact update.

To execute the sample method, you can use the corresponding Java or C# template class provided in Examples Using the Partner WSDL.

Java Example

```
public void updateSample(String id) {
  try {
      // Create an sObject of type contact
      SObject updateContact = new SObject();
      updateContact.setType("Contact");

      // Set the ID of the contact to update
      updateContact.setId(id);
      // Set the Phone field with a new value
      updateContact.setField("Phone", "(415) 555-1212");

      // Create another contact that will cause an error
      // because it has an invalid ID.
      SObject errorContact = new SObject();
      errorContact.setType("Contact");
      // Set an invalid ID on purpose
      errorContact.setId("SLFKJLFKJ");
      // Set the value of LastName to null
      errorContact.setFieldsToNull(new String[] {"LastName"});

      // Make the update call by passing an array containing
      // the two objects.
      SaveResult[] saveResults = partnerConnection.update(
         new SObject[] {updateContact, errorContact}
      );
      // Iterate through the results and write the ID of
      // the updated contacts to the console, in this case one contact.
      // If the result is not successful, write the errors
      // to the console. In this case, one item failed to update.
      for (int j = 0; j < saveResults.length; j++) {
          System.out.println("\nItem: " + j);
          if (saveResults[j].isSuccess()) {
              System.out.println("Contact with an ID of " +
                      saveResults[j].getId() + " was updated.");
          }
          else {
```

```
            // There were errors during the update call,
            // go through the errors array and write
            // them to the console.
            for (int i = 0; i < saveResults[j].getErrors().length; i++) {
              Error err = saveResults[j].getErrors()[i];
              System.out.println("Errors were found on item " + j);
              System.out.println("Error code: " +
                  err.getStatusCode().toString());
              System.out.println("Error message: " + err.getMessage());
            }
          }
      }
  } catch (ConnectionException ce) {
      ce.printStackTrace();
  }
}
```

For more information about `setFieldsToNull` (or its equivalent in client tools other than WSC), see `fieldsToNull` and Resetting Values to null.

C# Example

```
public void updateSample(String id) {
     try
     {
         // Create an sObject of type contact
         sObject updateContact = new sObject();
         updateContact.type = "Contact";

         // Set the ID of the contact to update
         updateContact.Id = id;
         // Set the Phone field to a new value.
         // The Phone field needs to be created as an XML element.
         System.Xml.XmlDocument doc = new System.Xml.XmlDocument();
         System.Xml.XmlElement phoneField = doc.CreateElement("Phone");
         phoneField.InnerText = "(415) 555-1212";

         // Add the Phone field to the contact
         updateContact.Any = new System.Xml.XmlElement[] {phoneField};

         // Create another contact that will cause an error
         // because it has an invalid ID.
         sObject errorContact = new sObject();
         errorContact.type = "Contact";
         // Set an invalid ID on purpose
         errorContact.Id = "SLFKJLFKJ";
         // Set the value of LastName to null
         errorContact.fieldsToNull = new String[] { "LastName" };

         // Make the update call by passing an array containing
         // the two objects.
         SaveResult[] saveResults = binding.update(
             new sObject[] {updateContact, errorContact});
         // Iterate through the results and write the ID of
```

```
        // the updated contacts to the console, in this case one contact.
        // If the result is not successful, write the errors
        // to the console. In this case, one item failed to update.
        for (int j = 0; j < saveResults.Length; j++) {
            Console.WriteLine("\nItem: " + j);
            if (saveResults[j].success)
            {
                Console.WriteLine("Contact with an ID of " +
                saveResults[j].id + " was updated.");
            }
            else
            {
                // There were errors during the update call,
                // go through the errors array and write
                // them to the console.
                for (int i = 0; i < saveResults[j].errors.Length; i++) {
                    Error err = saveResults[j].errors[i];
                    Console.WriteLine("Errors were found on item " + j.ToString());
                    Console.WriteLine("Error code: " +
                        err.statusCode.ToString());
                    Console.WriteLine("Error message: " + err.message);
                }
            }
        }
    }
    catch (SoapException e)
    {
        Console.WriteLine("An unexpected error has occurred: " + e.Message +
            " Stack trace: " + e.StackTrace);
    }
}
```

REFERENCE

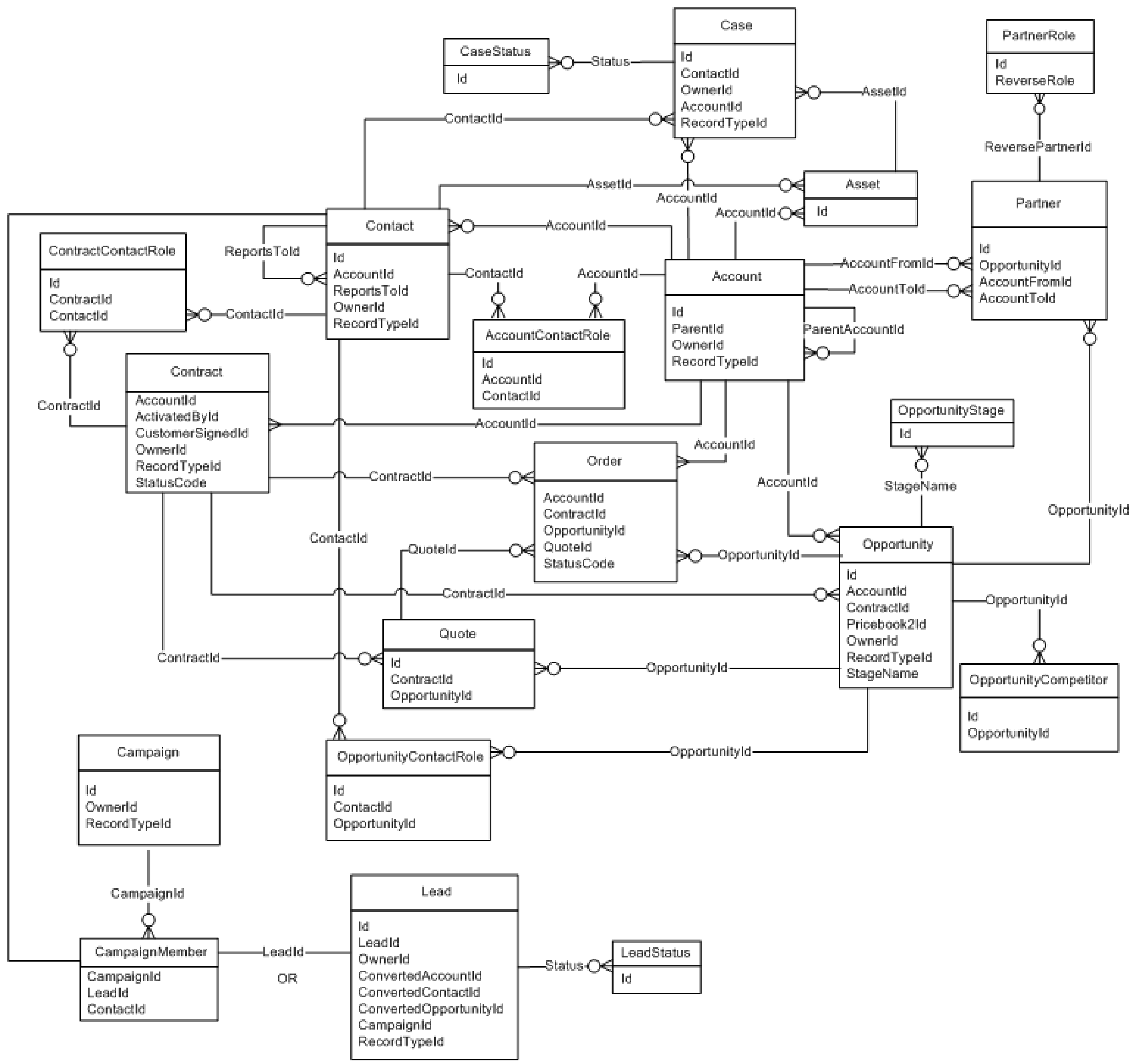
CHAPTER 7 Data Model

The entity relationship diagrams (ERDs) for standard Salesforce objects in this section illustrate important relationships between objects. Salesforce ERDs use crow's foot notation. The following ERDs are available.

- Sales Objects—includes accounts, contacts, opportunities, leads, campaigns, and other related objects
- Task and Event Objects—includes tasks and events and their related objects
- Support Objects—includes cases and solutions and their related objects
- Salesforce Knowledge Objects—includes view and vote statistics, article versions, and other related objects
- Document, Note, and Attachment Objects—includes documents, notes, and attachments and their related objects
- User, Sharing, and Permission Objects—includes users, profiles, and roles
- User Email Objects
- Profile and Permission Objects—includes users, profiles, permission sets, and related permission objects
- Record Type Objects—includes record types and business processes and their related objects
- Product and Schedule Objects—includes opportunities, products, and schedules
- Sharing and Team Selling Objects—includes account teams, opportunity teams, and sharing objects
- Forecasts Objects—includes objects for Collaborative Forecasts.
- Territory Management 2.0 Objects—includes territories and related objects associated with Territory Management 2.0
- Territory Management—includes territories and related objects
- Process Objects—includes approval processes and related objects
- Content Objects—includes content and libraries and their related objects
- Chatter Feed Objects—includes objects related to feeds
- Consent Management Objects—includes consent, authorization form, and communication subscription objects
- WDC Badge and Reward Objects—includes badge and reward objects
- WDC Feedback and Performance Cycle Objects—includes feedback and performance cycle objects

Each ERD includes links to the topics that describe the fields in objects related to the diagram. The data model for your custom objects depends on what you create.

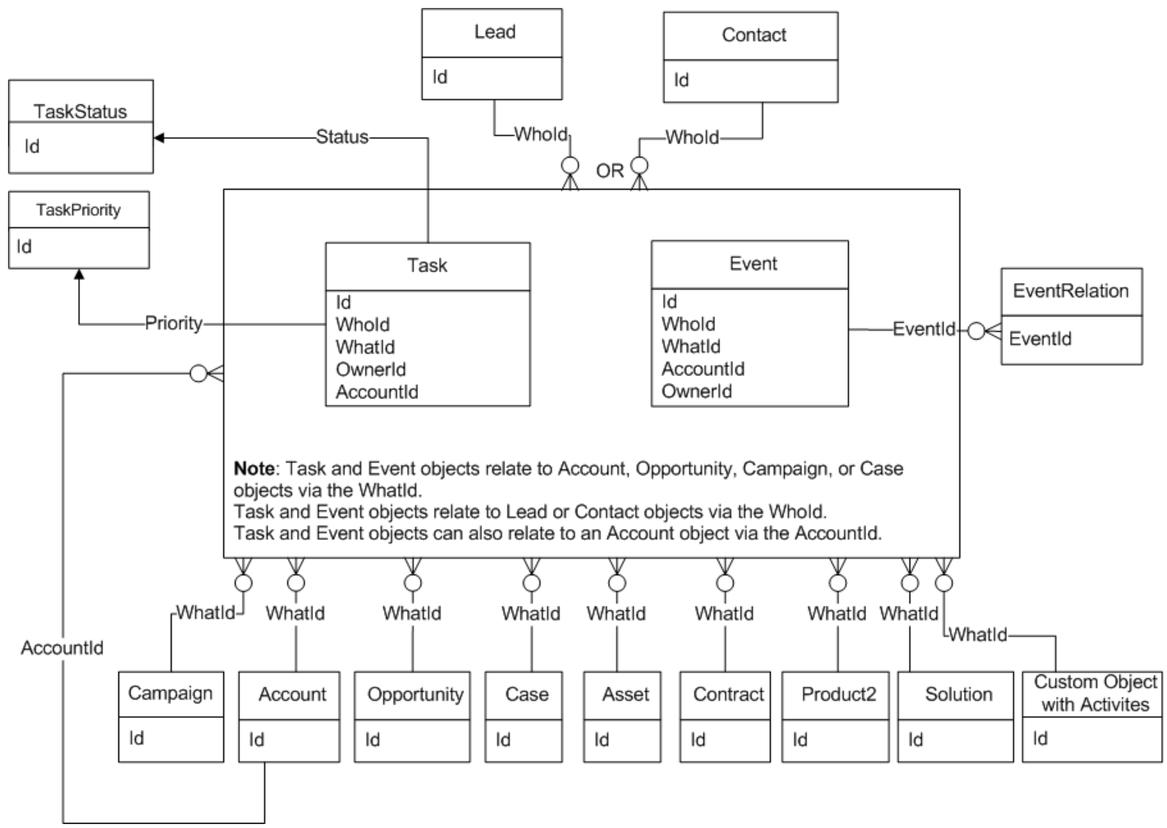
Sales Objects



SEE ALSO:

[Standard Objects]
[Data Model]

Task and Event Objects

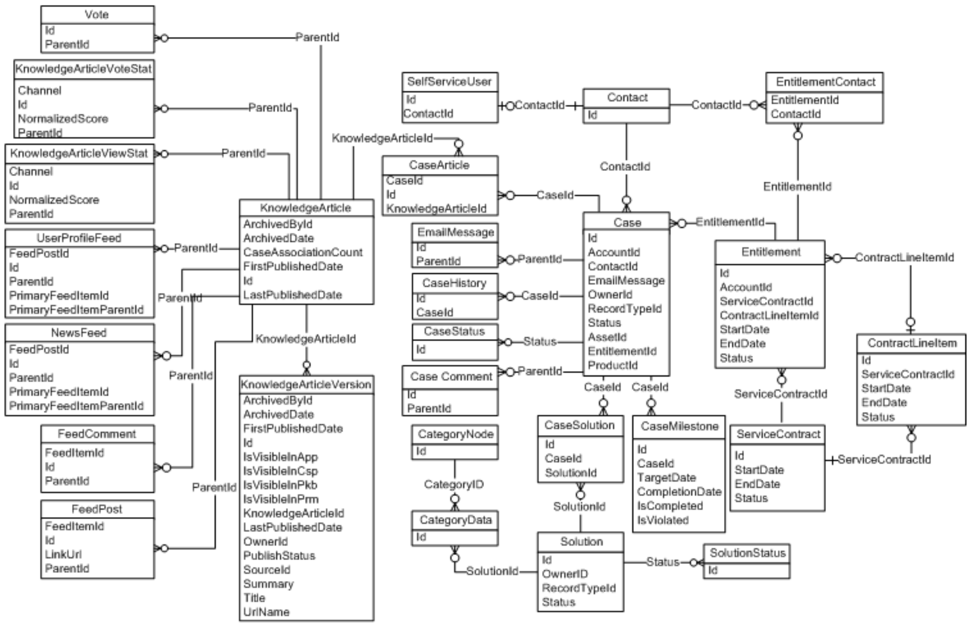


SEE ALSO:

Standard Objects

Data Model

Support Objects

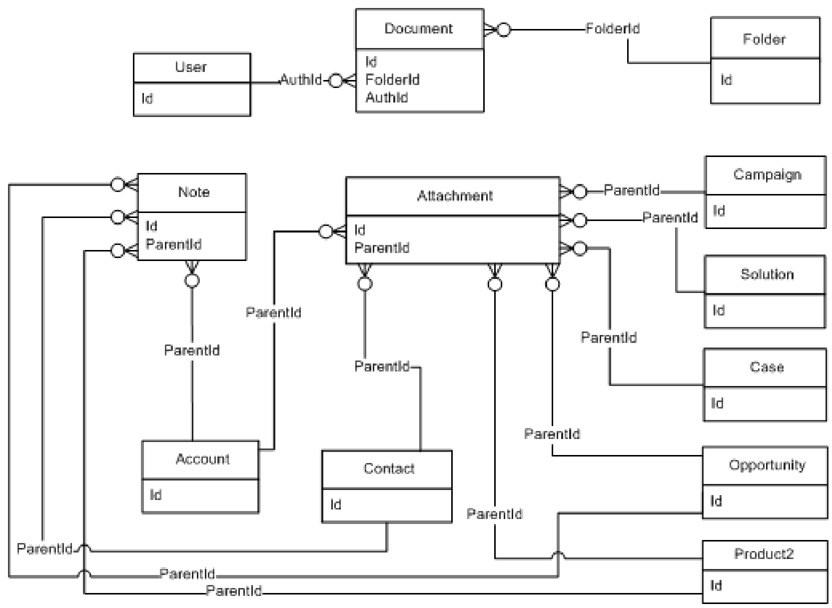


SEE ALSO:

[Standard Objects]()

[Data Model]()

Document, Note, and Attachment Objects

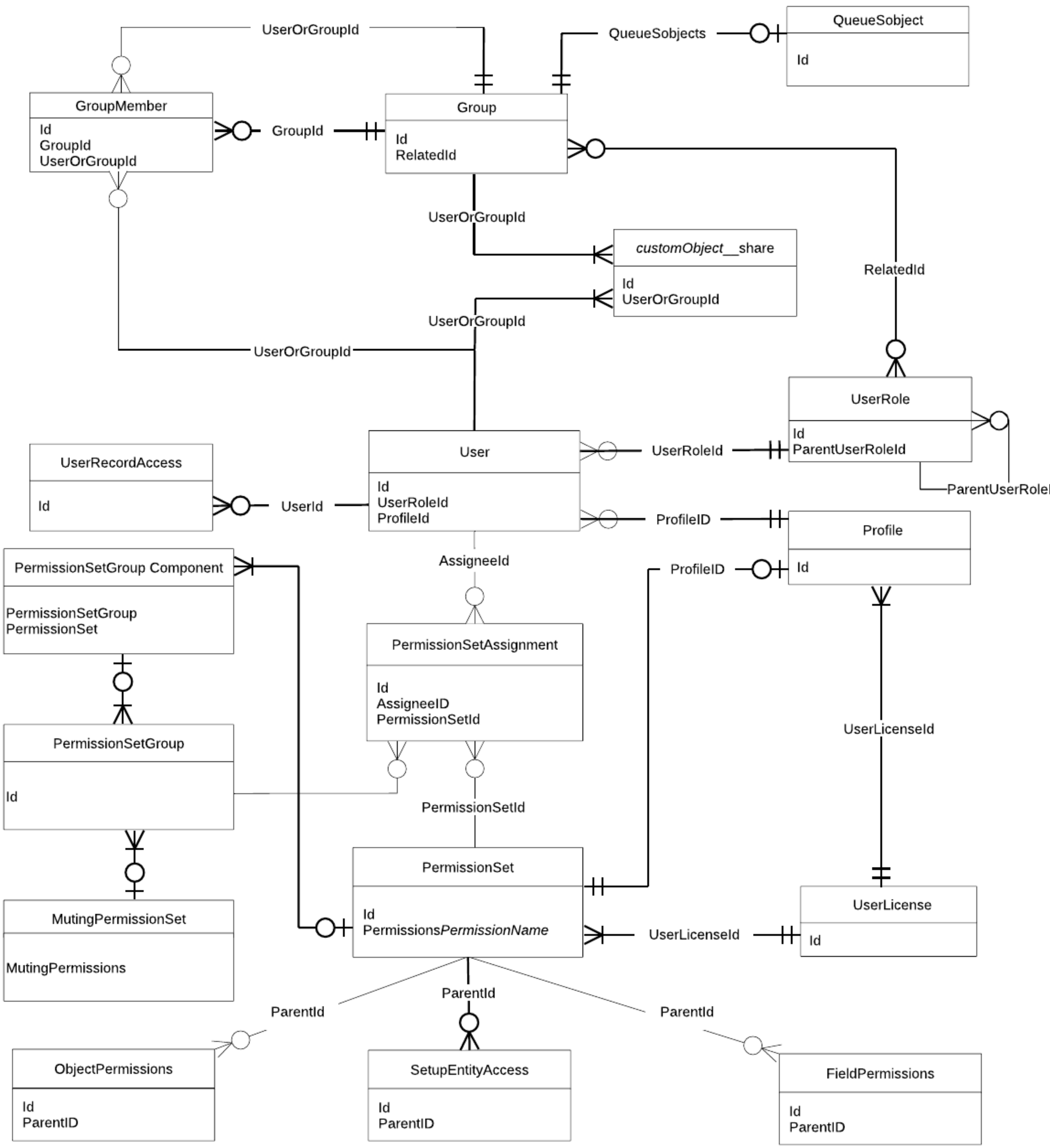


SEE ALSO:

[Standard Objects]()

[Data Model]()

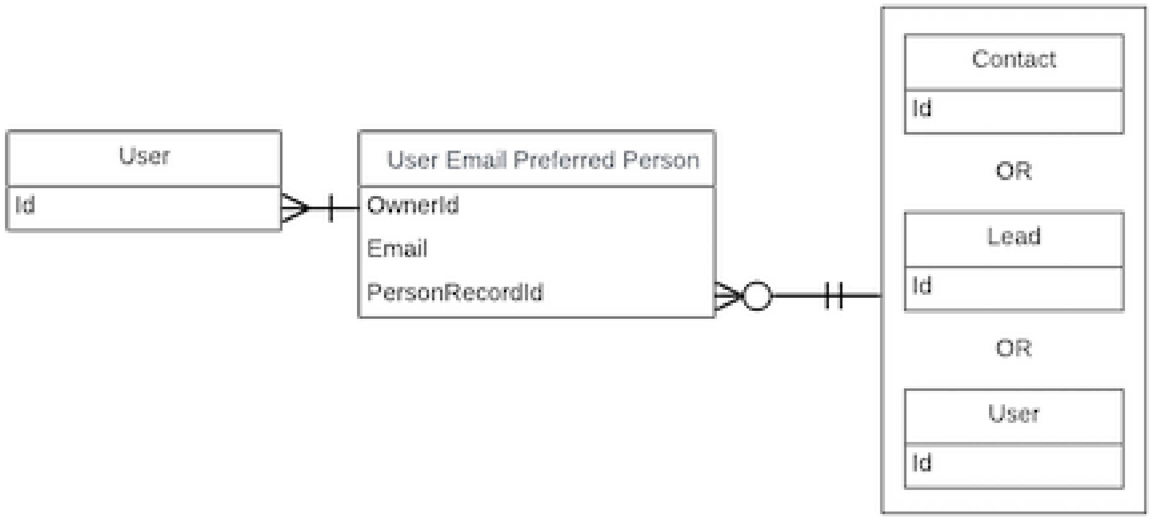
User, Sharing, and Permission Objects



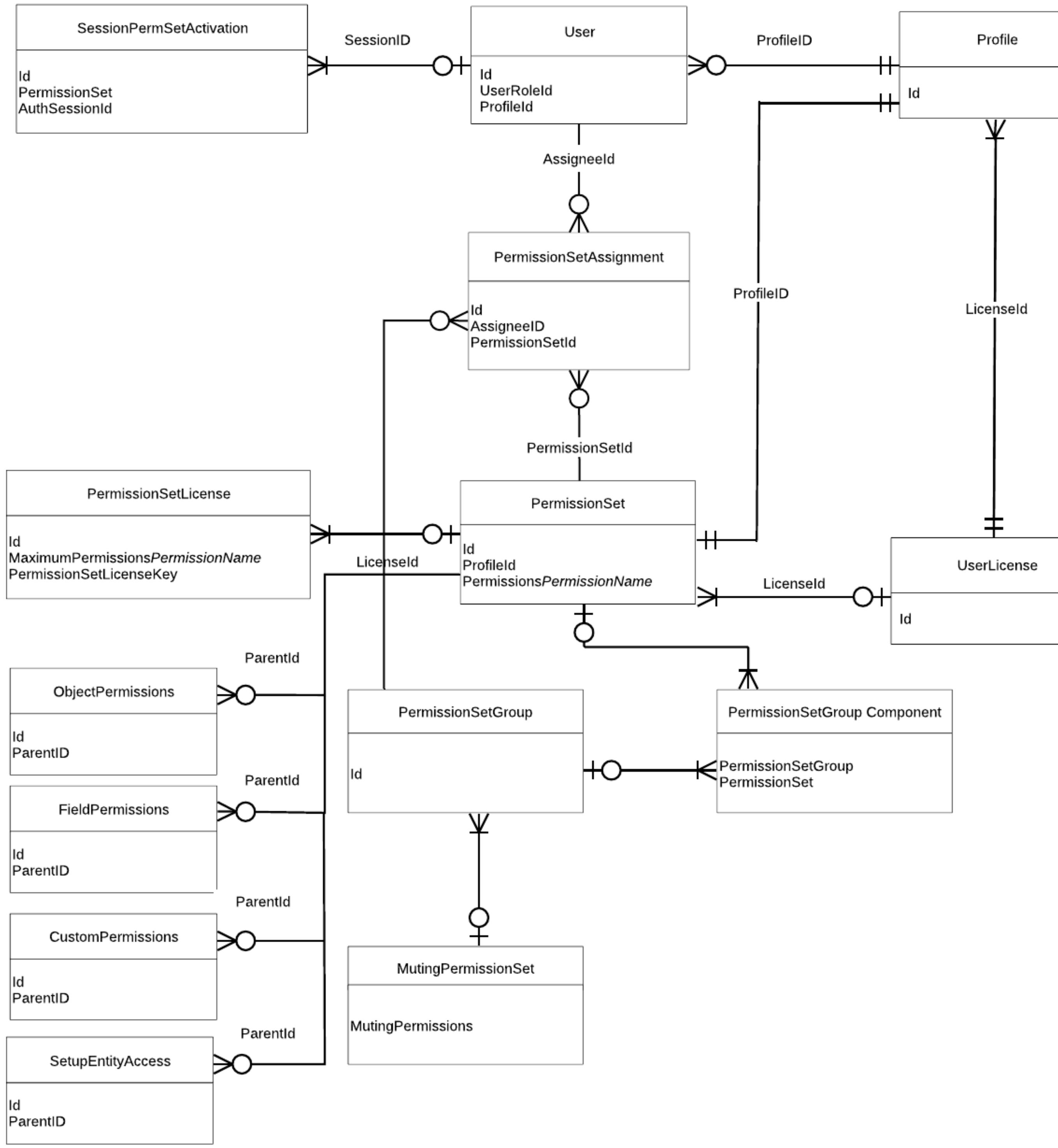
SEE ALSO:

- Standard Objects
- Data Model
- Profile and Permission Objects

User Email Objects



Profile and Permission Objects


SessionPermSetActivation
Id
PermissionSet
AuthSessionId
SessionID
User
Id
UserRoleId
ProfileId
ProfileID
Profile
Id
AssigneeId
PermissionSetAssignment
Id
AssigneeID
PermissionSetId
ProfileID
LicenseId
PermissionSetId
PermissionSetLicense
Id
MaximumPermissions*PermissionName*
PermissionSetLicenseKey
PermissionSet
Id
ProfileId
Permissions*PermissionName*
LicenseId
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UserLicense
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ParentId
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PermissionSetGroup
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PermissionSetGroup Component
PermissionSetGroup
PermissionSet
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FieldPermissions
Id
ParentID
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CustomPermissions
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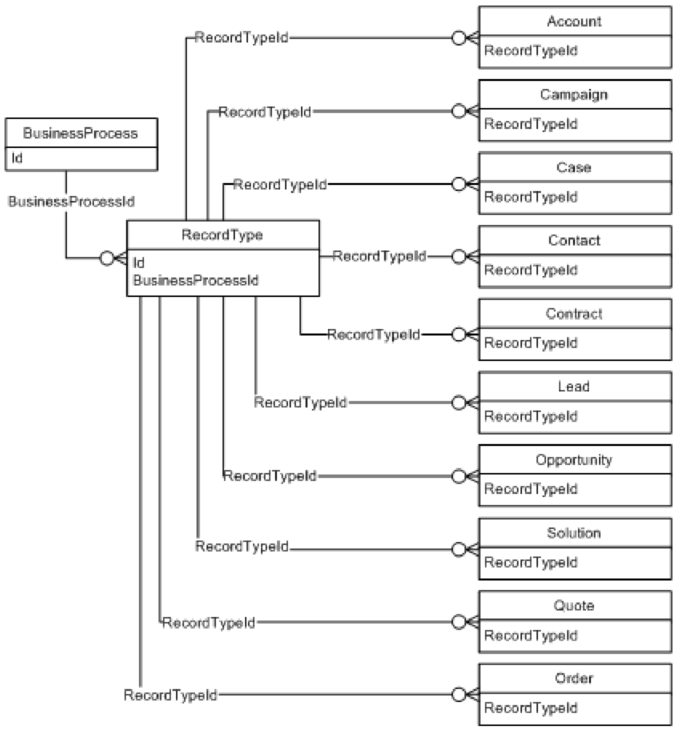
ParentID
MutingPermissionSet
MutingPermissions
ParentId
SetupEntityAccess
Id
ParentID

SEE ALSO:

Standard Objects

Data Model

Record Type Objects

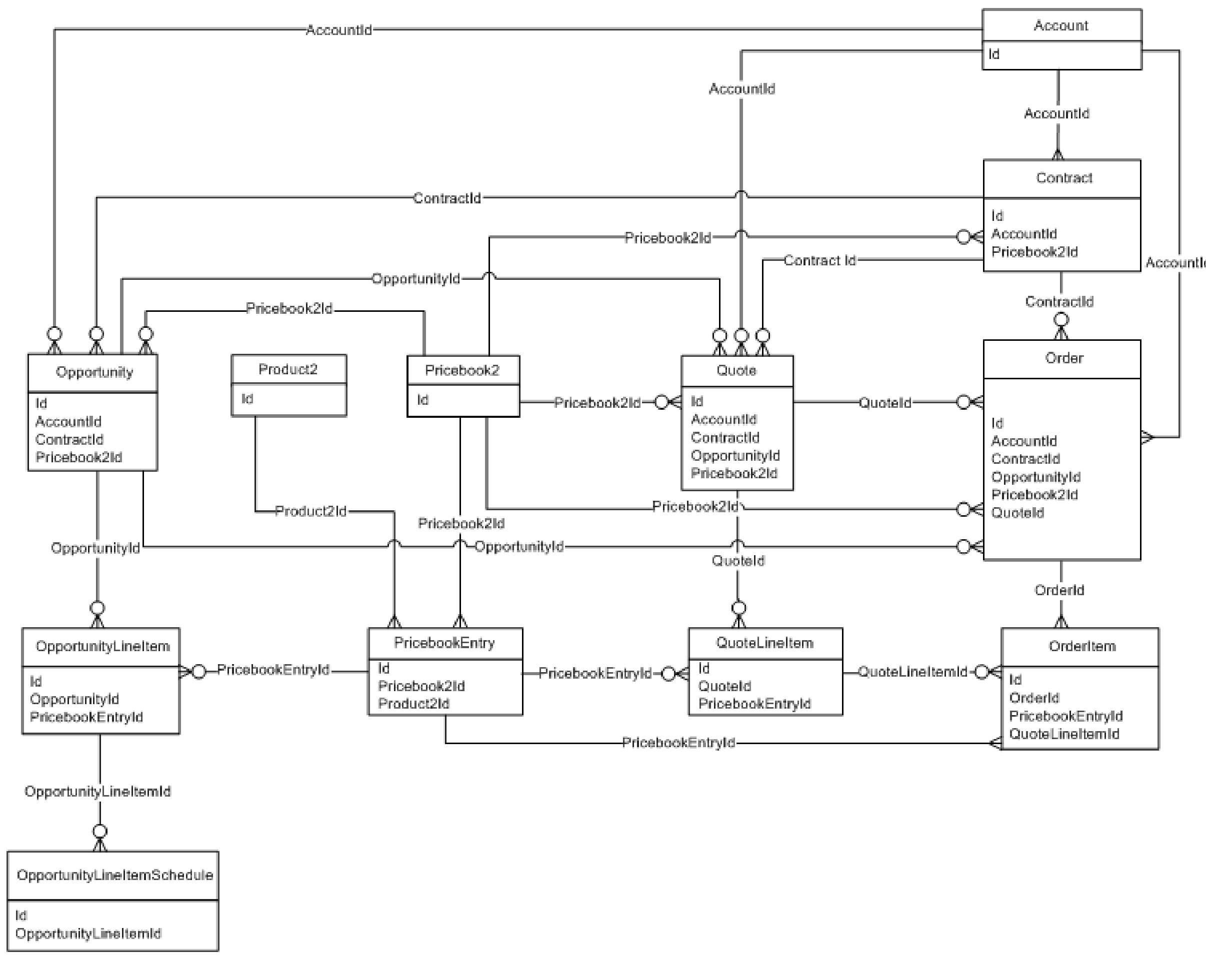


SEE ALSO:

Standard Objects

Data Model

Product and Schedule Objects

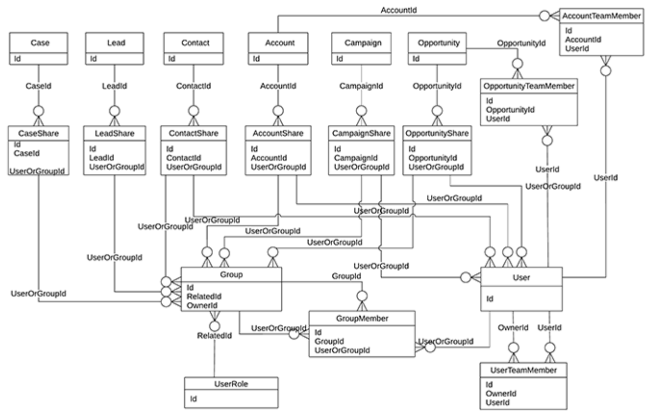


Create a separate PricebookEntry for each currency and price combination.

SEE ALSO:

- Standard Objects
- Data Model

Sharing and Team Selling Objects



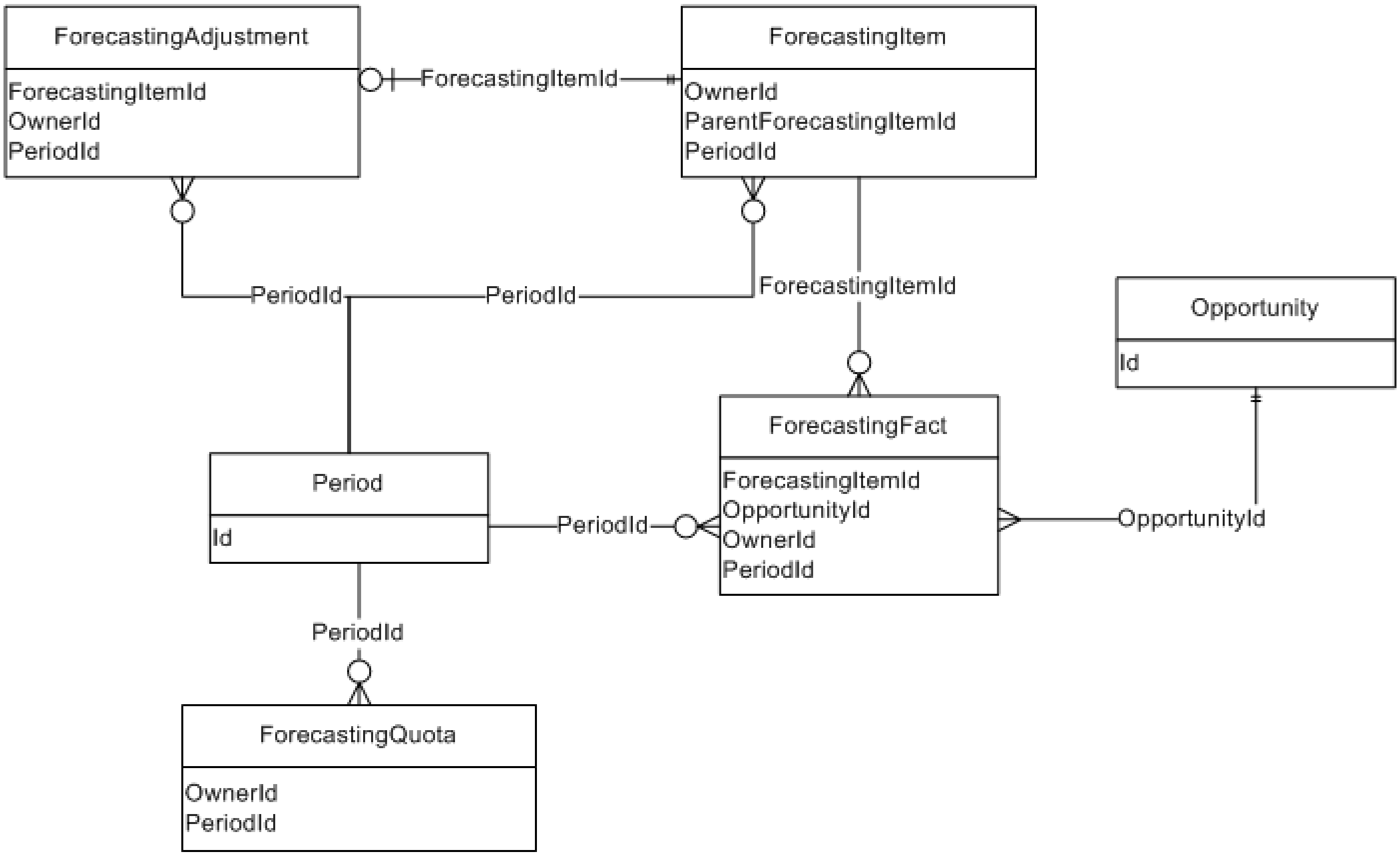
SEE ALSO:

[Standard Objects]()

[Data Model]()

Forecasts Objects

Note: This information only applies to Collaborative Forecasts.

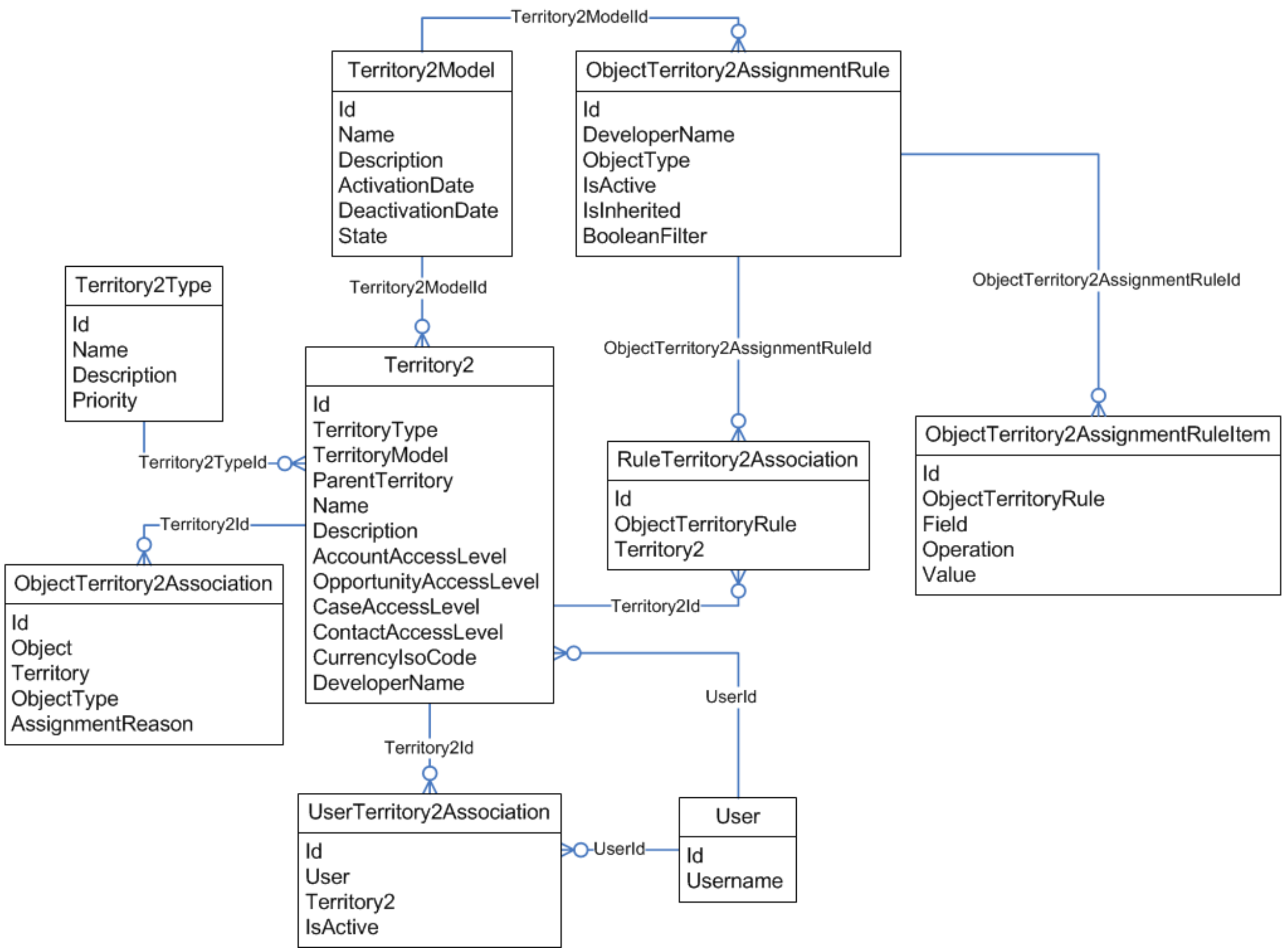


SEE ALSO:

Standard Objects
Data Model

Territory Management 2.0 Objects

Note: This information applies to Territory Management 2.0 only, not to previous versions of Territory Management.



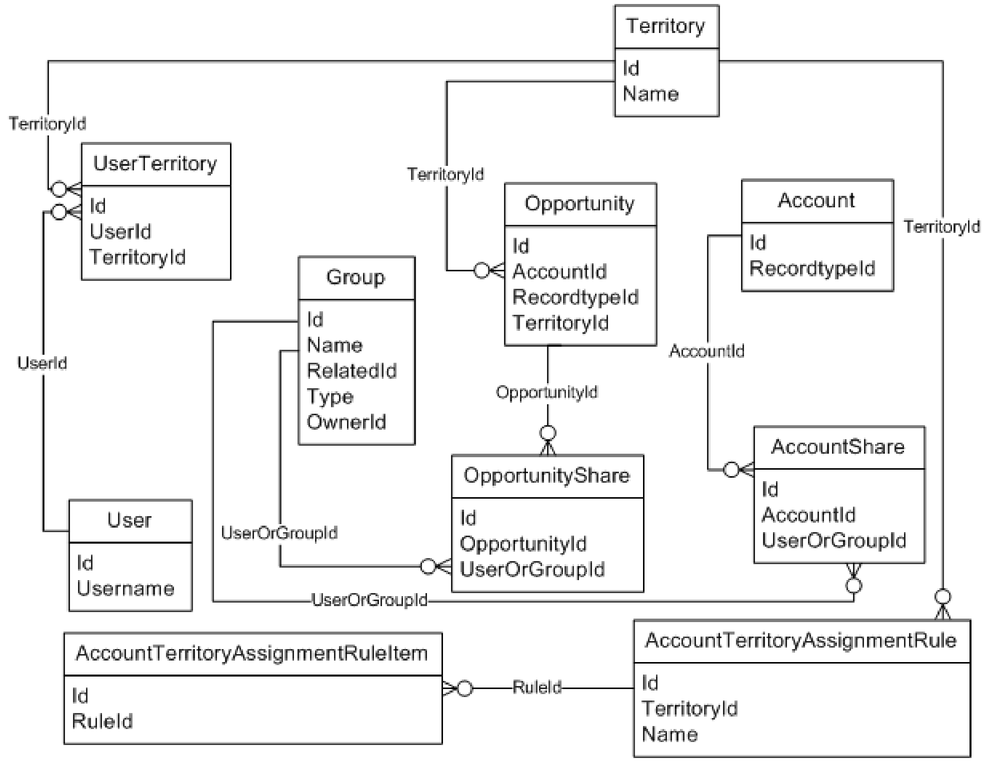
SEE ALSO:

Standard Objects

Data Model

Territory Management

Note: The original territory management feature is scheduled for retirement for all customers as of Summer '21. After the feature is retired, users can't access the original territory management feature and its underlying data. We encourage you to migrate to Enterprise Territory Management. We also strongly recommend that you keep a comprehensive backup of your territory data while you're still using the original territory management feature. For more information, see The Original Territory Management Module Will Be Retired in the Summer '21 Release. The information in this topic applies to the original territory management feature only, and not to Enterprise Territory Management.

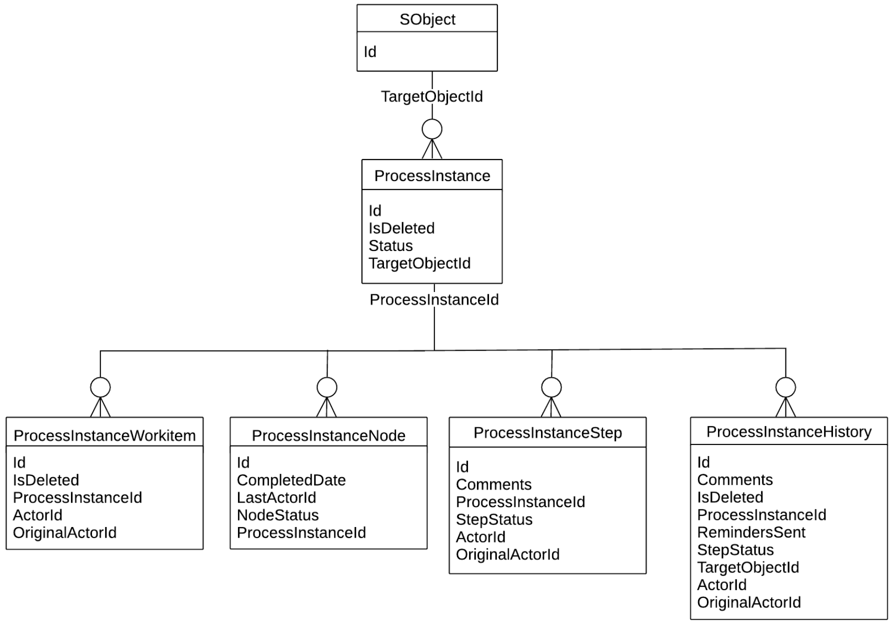


SEE ALSO:

[Standard Objects]

[Data Model]

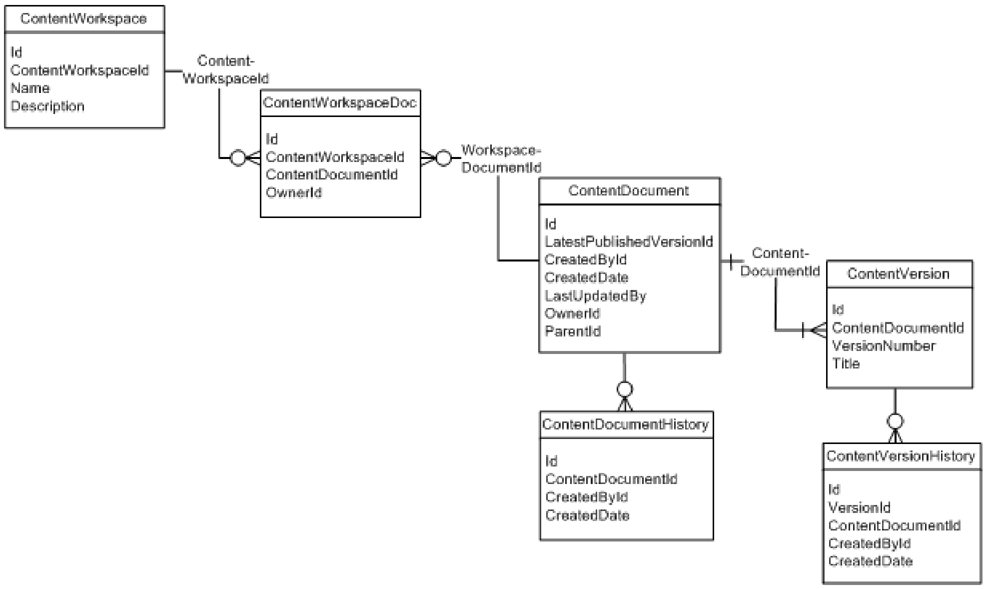
Process Objects



SEE ALSO:

Standard Objects
Data Model
Core Data Types Used in API Calls

Content Objects



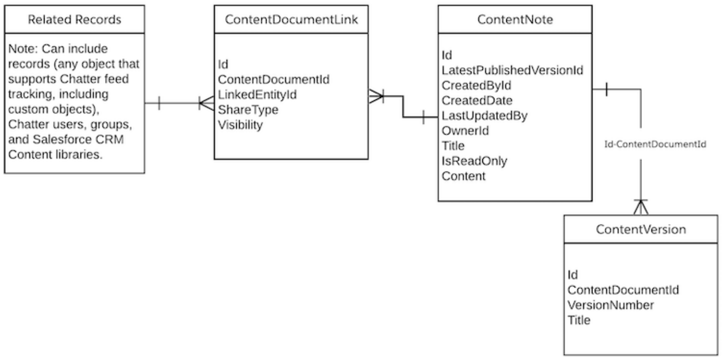
SEE ALSO:

Standard Objects

Data Model

ContentNote Objects

The ContentNote object represents notes created with the enhanced version of the Salesforce note-taking tool.



SEE ALSO:

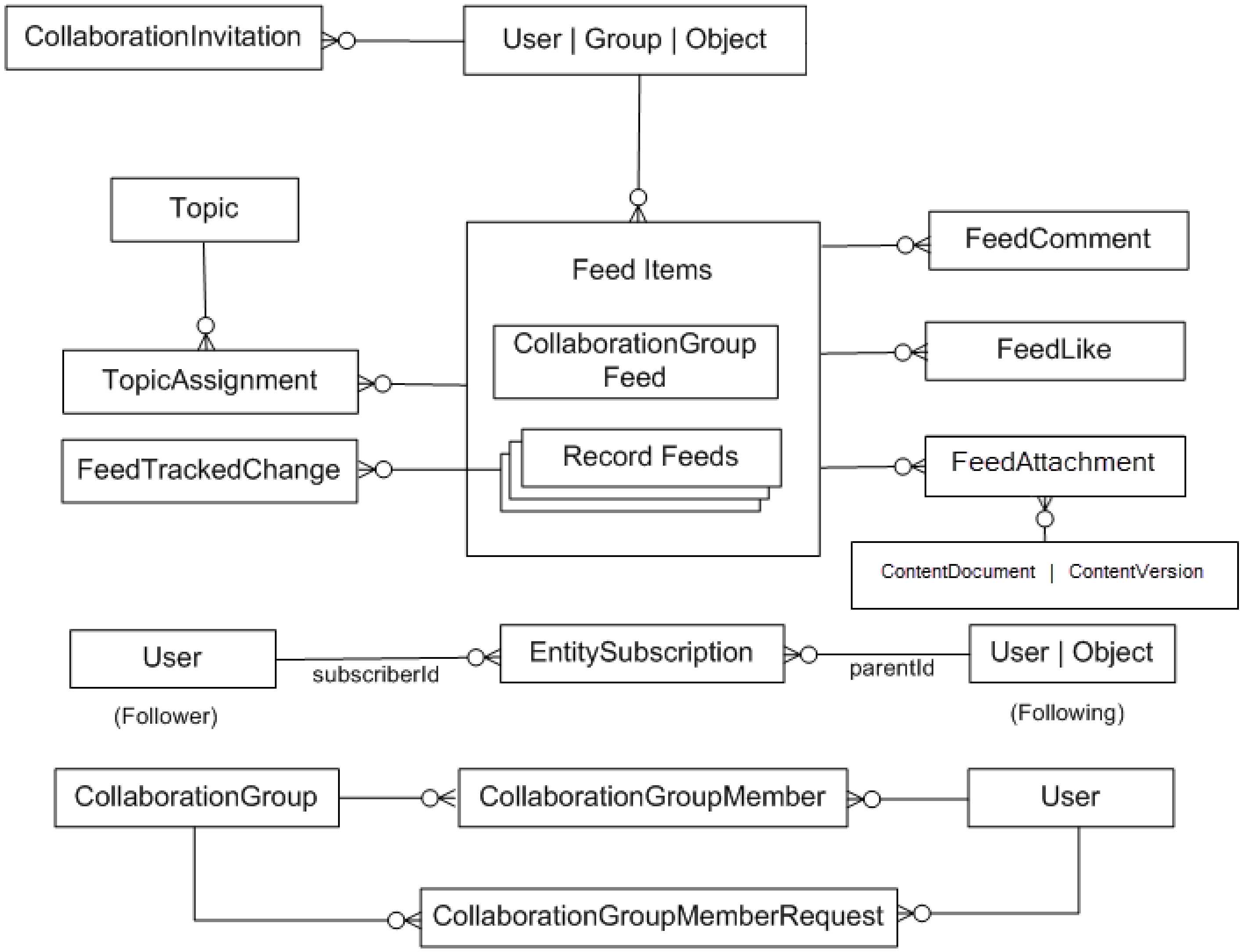
ContentNote

Chatter Objects

Diagram showing the relationships between the Chatter objects

The following diagram shows the relationships between the major Chatter objects.

- A feed item is an entry in the feed, such as a change to a record that's being followed, an updated post, or a user status change.
- All feed items have a `ParentId`, which is either:
  - a record
  - a user
  - a group

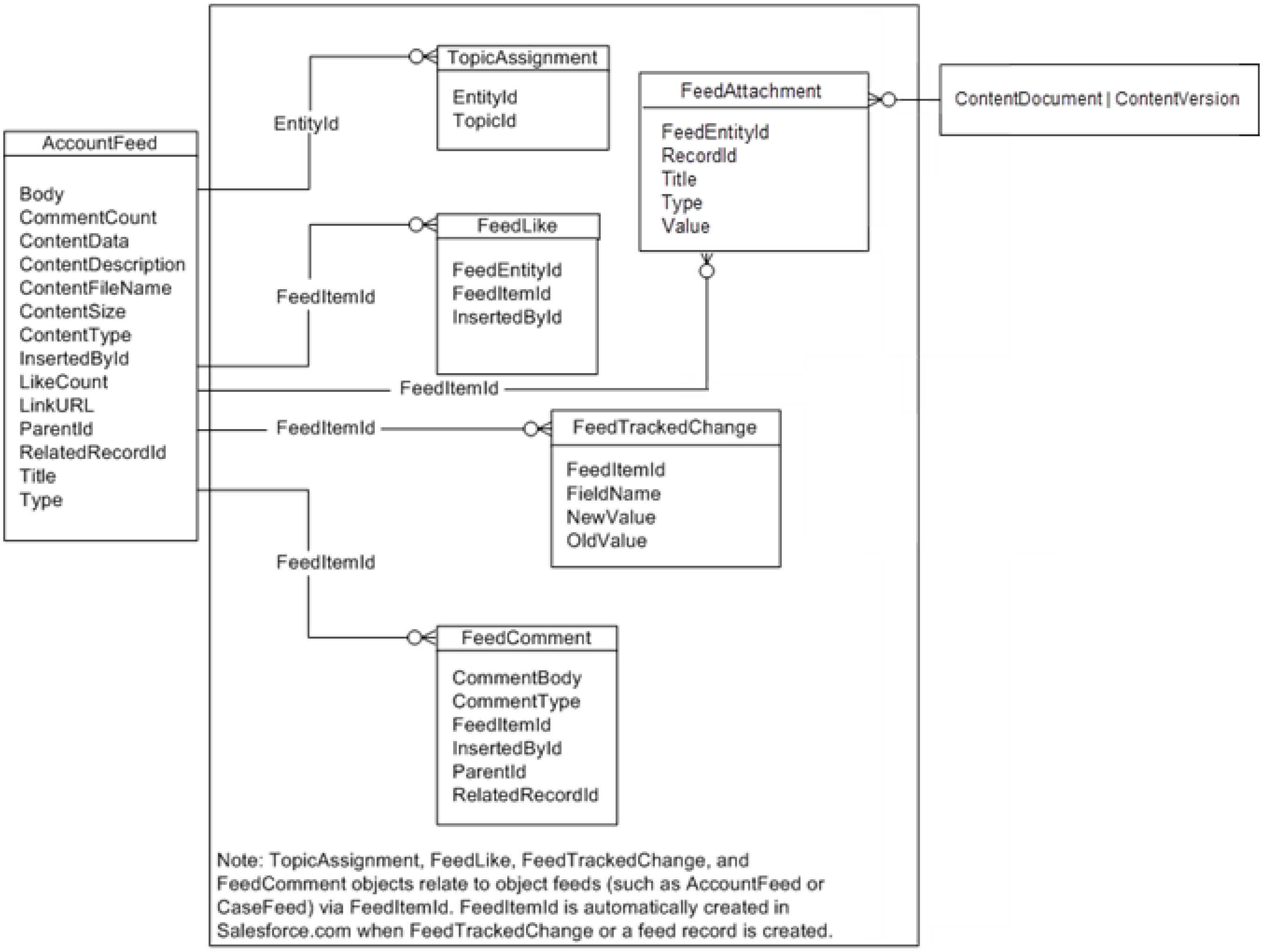


SEE ALSO:

[Standard Objects]

[Data Model]

Chatter Feed Objects



Standard Objects with Feeds

For a list of standard objects with feeds, see StandardObjectNameFeed.

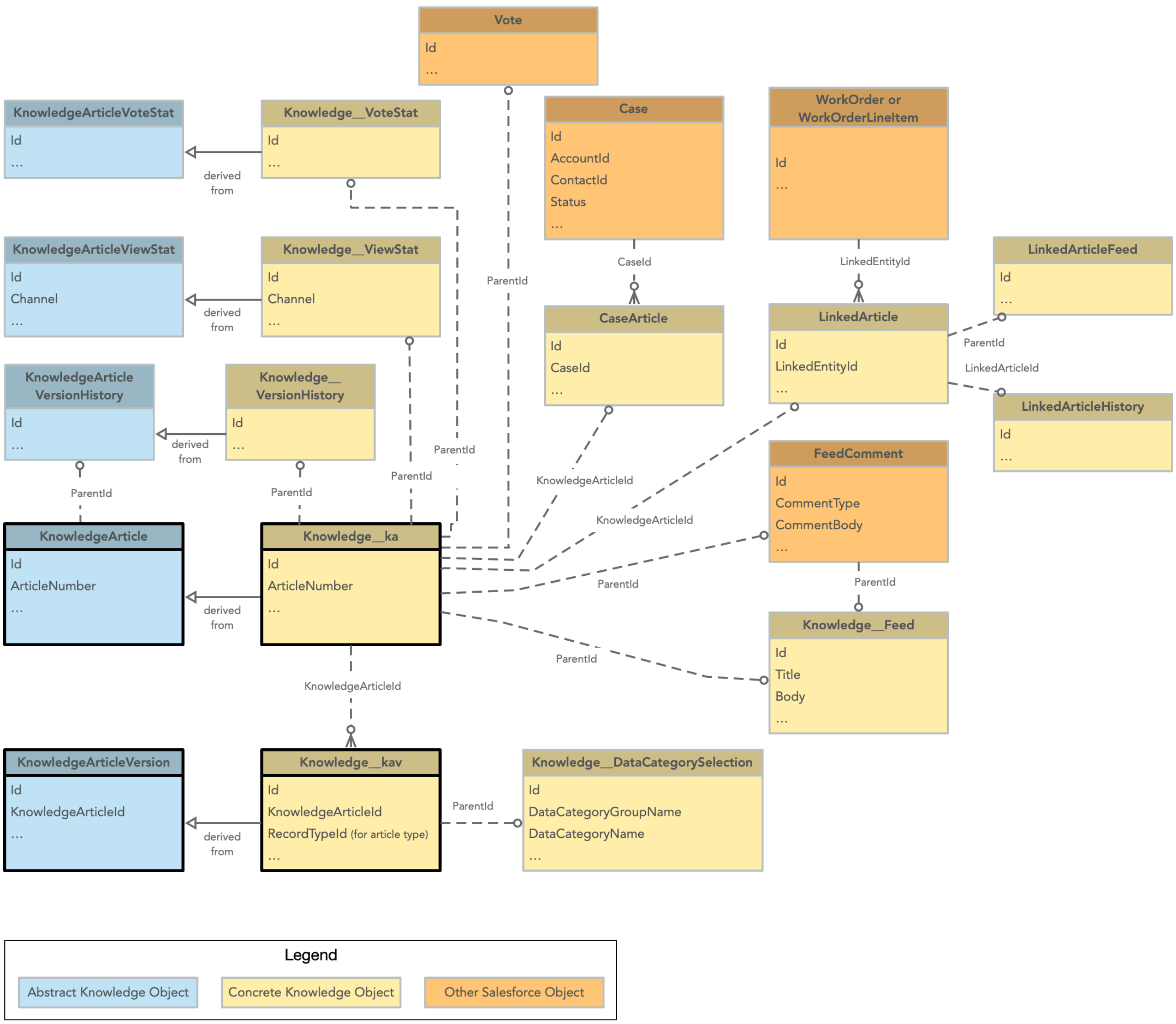
SEE ALSO:

Standard Objects

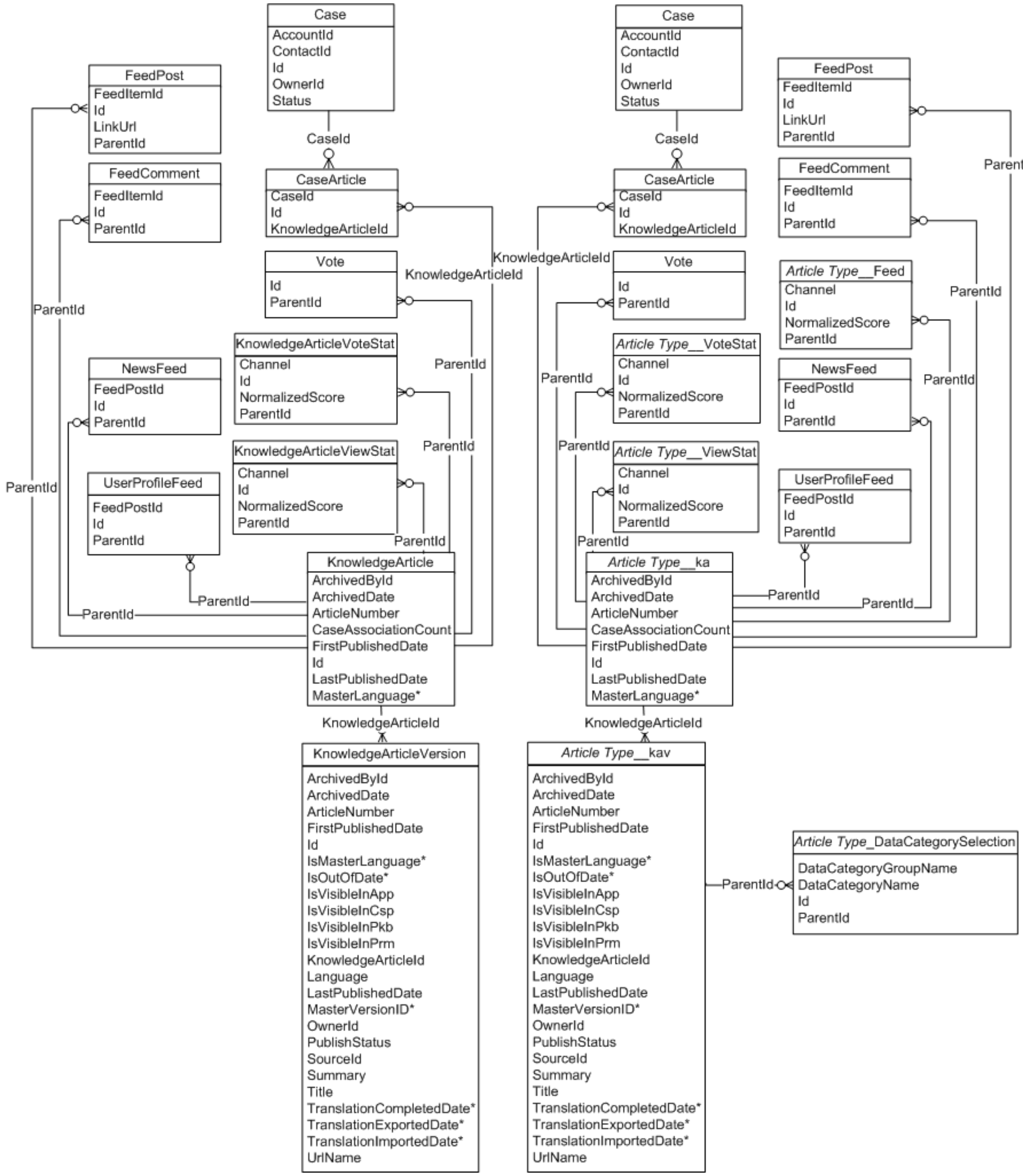
Data Model

Salesforce Knowledge Objects

This entity relationship diagram (ERD) illustrates relationships between the Salesforce Knowledge objects in Lightning Knowledge.



This ERD illustrates the relationship between objects in Salesforce Classic.

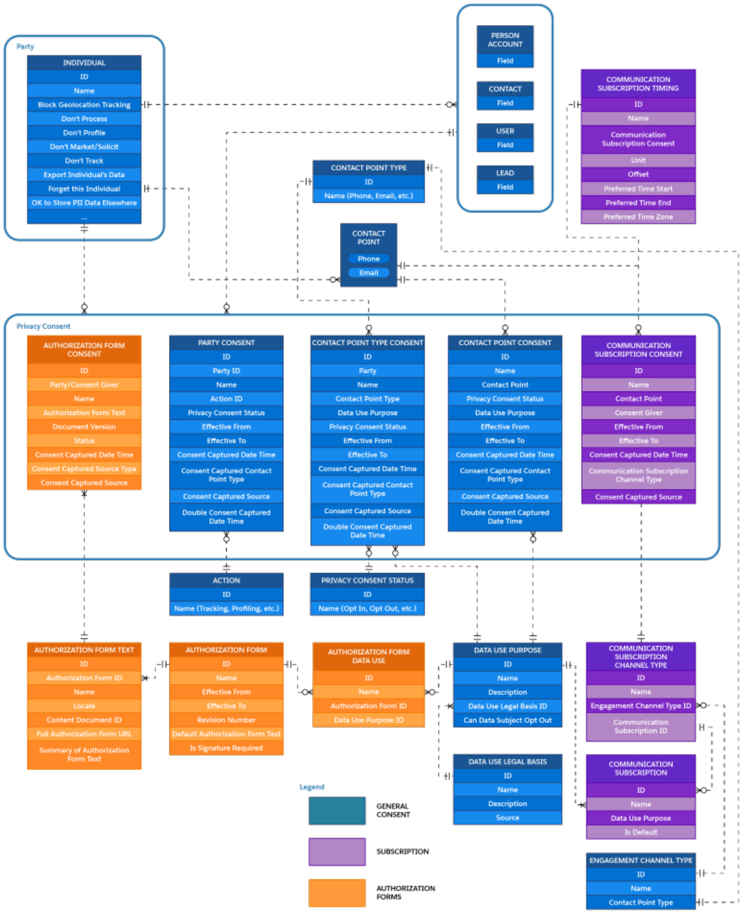


SEE ALSO:

[Standard Objects](#)

[Data Model](#)

Consent Management Objects

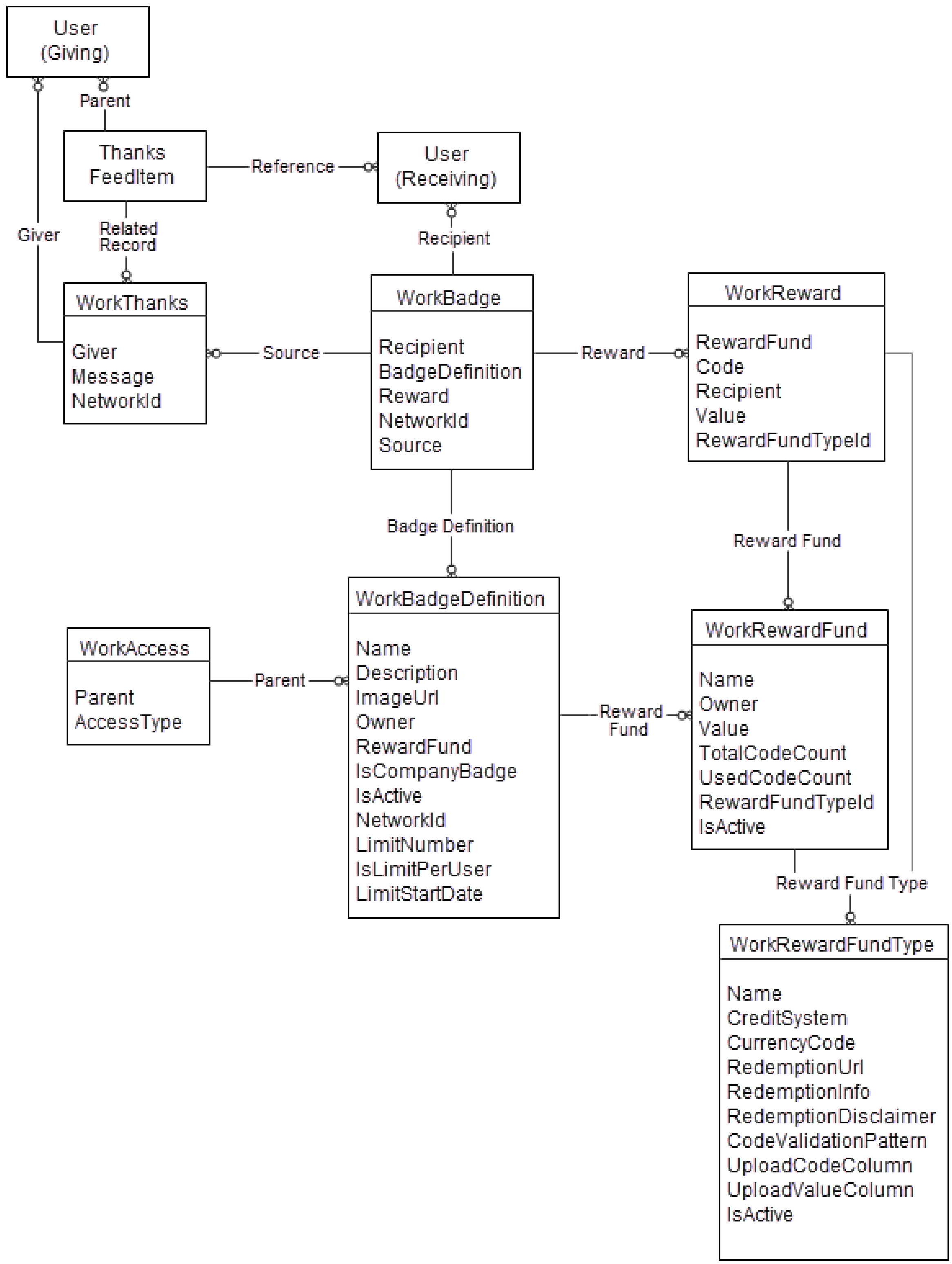


SEE ALSO:

[Standard Objects]

[Data Model]

WDC Badge and Reward Objects

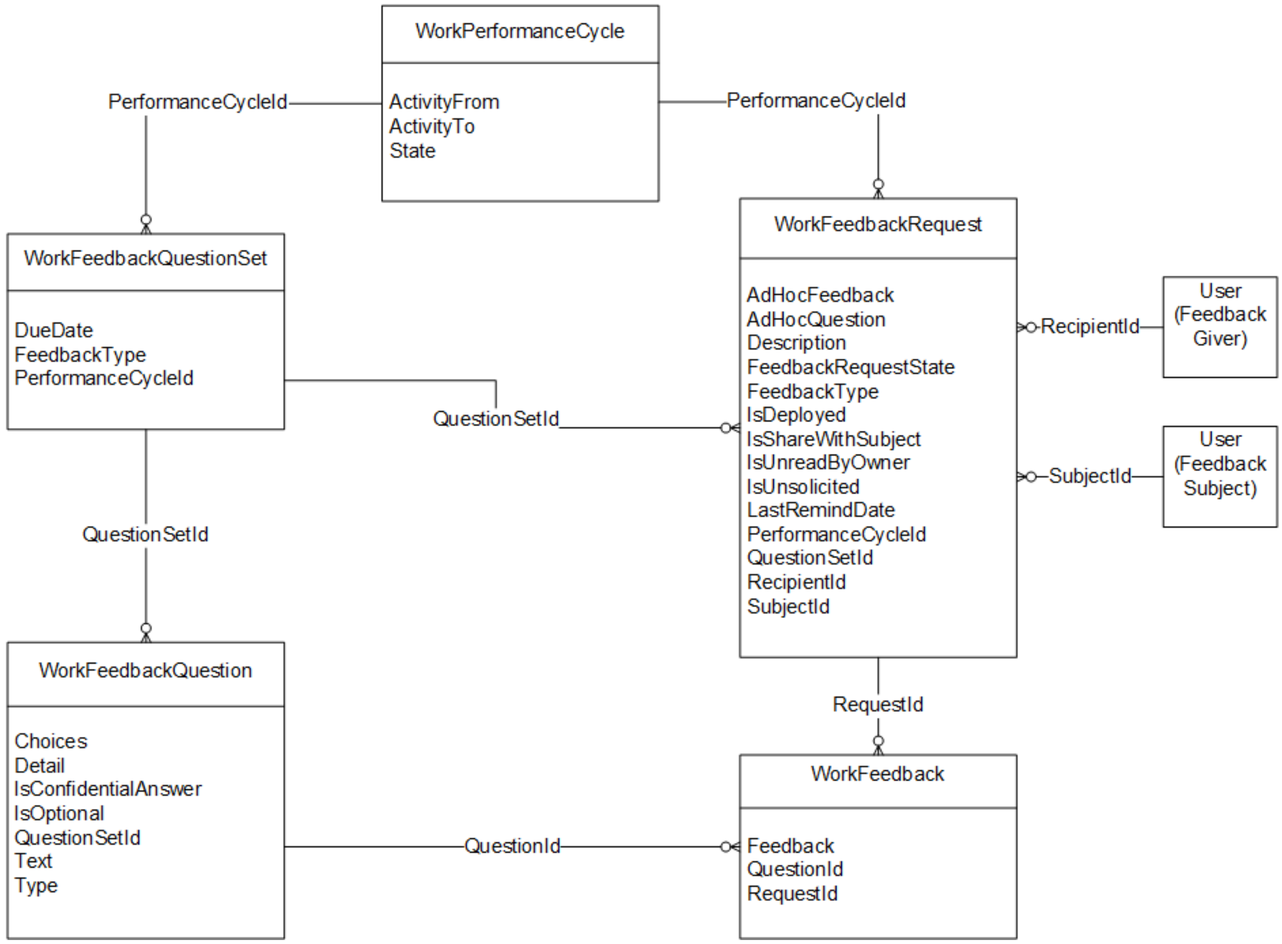


SEE ALSO:

Standard Objects

Data Model

WDC Feedback and Performance Cycle Objects



SEE ALSO:

Standard Objects

Data Model

CHAPTER 8 Standard Objects

This section provides a list of standard objects and their standard fields.

Some fields may not be listed for some objects. To see the system fields for each object, see System Fields.

To verify the complete list of fields for an object, you can use a describe call from the API, or inspect with an appropriate tool, for example, inspecting the WSDL or using a schema viewer.

AcceptedEventRelation

Represents event participants (invitees or attendees) with the status `Accepted` for a given event.

Account

Represents an individual account, which is an organization or person involved with your business (such as customers, competitors, and partners).

AccountBrand

Represents the brand details of a Partner Account. This object is available in API version 43.0 and later.

AccountContactRelation

Represents a relationship between a contact and one or more accounts.

AccountCleanInfo

Stores the metadata Data.com Clean uses to determine an account record's clean status. AccountCleanInfo helps you automate the cleaning or related processing of account records.

AccountContactRole

Represents the role that a Contact plays on an Account.

AccountInsight

Represents an individual insight (a key business development) related to an account record.

AccountOwnerSharingRule

Represents the rules for sharing an account with a User other than the owner.

AccountPartner

This object represents a partner relationship between two Account records. An AccountPartner record is created automatically when a Partner record is created for a partner relationship between two accounts.

AccountRelationship

Represents a relationship of a given type between two accounts. This object is available in API version 45.0 and later.

AccountRelationshipShareRule

Represents the rule that determines which object records are shared, how they are shared, the account relationship type that shares the records, and the level of access granted to the records. This object is available in API version 45.0 and later.

AccountShare

Represents a sharing entry on an Account.

AccountTag

Associates a word or short phrase with an Account.

AccountTeamMember

Represents a User who is a member of an Account team.

AccountTerritoryAssignmentRule

An account assignment rule that assigns accounts to territories based on account fields. Only available if territory management has been enabled for your organization.

AccountTerritoryAssignmentRuleItem

A row of selection criteria for an AccountTerritoryAssignmentRule object. Only available if territory management has been enabled for your organization.

AccountTerritorySharingRule

Represents the rules for sharing an Account within a Territory.

AccountUserTerritory2View

Represents the view of the Users in Assigned Territories related list in Lightning Experience. Available in API version 42.0 and later.

ActionCadence

Represents the definition of a sales cadence. This object is available in API version 45.0 and later.

ActionCadenceRule

Represents the logic that a branch step uses to make decisions in your sales cadence. Use ActionCadenceRule to learn about a branch step, including its logic and what the next step is. This object is available in API version 48.0 and later.

ActionCadenceRuleCondition

Represents the logic for a branch step. This object is available in API version 48.0 and later.

ActionCadenceStep

Represents a step in a sales cadence. Use ActionCadenceStep to learn which steps belong to a sales cadence, and how the steps are connected to each other. This object is available in API version 48.0 and later.

ActionCadenceStepTracker

Represents a step in an active sales cadence for a specific sales cadence target. This object is available in API version 48.0 and later.

ActionCadenceTracker

Represents an active sales cadence target. This object is available in API version 45.0 and later.

ActionLinkGroupTemplate

Action link templates let you reuse action link definitions and package and distribute action links. An action link is a button on a feed element. Clicking on an action link can take a user to another Web page, initiate a file download, or invoke an API call to an external server or Salesforce. Use action links to integrate Salesforce and third-party services into the feed. Every action link belongs to an action link group and action links within the group are mutually exclusive. This object is available in API version 33.0 and later.

ActionLinkTemplate

Action link templates let you reuse action link definitions and package and distribute action links. An action link is a button on a feed element. Clicking an action link can take a user to another Web page, initiate a file download, or invoke an API call to an external server or Salesforce. Use action links to integrate Salesforce and third-party services into the feed. This object is available in API version 33.0 and later.

ActionPlan

Represents the instance of an action plan, a set of tasks created from an action plan template. This object is used by more than one cloud in Industries.

ActionPlanItem

Represents the instance of an action plan item. This object is used by more than one cloud in Industries.

ActionPlanTemplate

Represents the instance of an action plan template. This object is used by more than one cloud in Industries.

ActionPlanTemplateItem

Represents the instance of an item on an action plan template version. This object is used by more than one cloud in Industries.

ActionPlanTemplateItemValue

Represents the value associated with an action plan template item. This object is used by more than one cloud in Industries.

ActionPlanTemplateVersion

Represents the version of an action plan template. This object is used by more than one cloud in Industries.

ActiveScratchOrg

Represents an active scratch org. This object is available in API version 41.0 and later.

ActivityHistory

This read-only object is displayed in a related list of closed activities—past events and closed tasks—related to an object. It includes activities for all contacts related to the object. ActivityHistory fields for phone calls are only available if your organization uses Salesforce CRM Call Center.

ActivityMetric

Represents activities that were added to Salesforce automatically by Einstein Activity Capture and manually by users.

AdditionalNumber

Represents an optional additional number for a call center. This additional number is visible in the call center's phone directory.

Address

Represents a mailing, billing, or home address.

AgentWork

Represents a work assignment that's been routed to an agent. This object is available in API version 32.0 and later.

AgentWorkSkill

Represents a skill used to route a work assignment to an agent. AgentWorkSkill is used for reporting and represents the result of a routing decision. This object is available in API version 42.0 and later.

AIApplication

Represents an AI application such as Einstein Prediction Builder. This object is available in API version 50.0 and later.

AIApplicationConfig

Additional prediction information related to an AI application. This object is available in API version 50.0 and later.

AIInsightAction

Represents an Einstein prediction insight action. This object is available in API version 47.0 and later.

AIInsightFeedback

Represents an Einstein prediction insight feedback. This object is available in API version 47.0 and later.

AIInsightReason

Represents an Einstein prediction insight reason. This object is available in API version 47.0 and later.

AIInsightValue

Represents an Einstein prediction insight value. This object is available in API version 47.0 and later.

AIRecordInsight

Represents an Einstein prediction insight. This object is available in API version 47.0 and later.

AllowedEmailDomain

Represents an allowed email domain for users in your organization. You can define an allowlist to restrict the email domains allowed in a user's `Email` field. This object is available in API version 29.0 and later.

AlternativePaymentMethod

Represents a payment method that doesn't have a defined Commerce Orders entity such as CardPaymentMethod on page 577 or DigitalWallet on page 1008. Common examples of alternative payment methods for Commerce Orders include CashOnDeliver, Klarna, and Direct Debit. `AlternativePaymentMethod` functions the same as any other type of payment method for processing transactions in the payment gateway. This object is available in API version 51.0 and later.

Announcement

Represents a Chatter group announcement. This object is available in API version 30.0 and later.

ApexClass

Represents an Apex class.

ApexComponent

Represents a definition for a custom component that can be used in a Visualforce page alongside standard components such as `<apex:relatedList>` and `<apex:dataTable>`.

ApexLog

Represents a debug log containing information about a transaction, including information about Apex, Visualforce, and workflow and validation rules. This object is available in API version 19.0 and later.

ApexPage

Represents a single Visualforce page.

ApexPageInfo

Represents metadata about a single Visualforce page. This object is available in API version 48.0 and later.

ApexTestQueueItem

Represents a single Apex class in the Apex job queue. This object is available in API version 23.0 and later.

ApexTestResult

Represents the result of an Apex test method execution. This object is available in API version 23.0 and later.

ApexTestResultLimits

Captures the Apex test limits used for a particular test method execution. An instance of this object is associated with each ApexTestResult record. This object is available in API version 37.0 and later.

ApexTestRunResult

Contains summary information about all the test methods that were run in a particular Apex job. This object is available in API version 37.0 and later.

ApexTestSuite

Represents a suite of Apex classes to include in a test run. A TestSuiteMembership object associates each class with the suite. This object is available in API version 36.0 and later.

ApexTrigger

Represents an Apex trigger.

AppAnalyticsQueryRequest

Represents a request for AppExchange App Analytics data.

AppDefinition

Represents the metadata of an app and its navigation items. Metadata is returned only for apps that the current user can access. This object is available in API version 43.0 and later.

AppExtension

Represents a connection between the Field Service mobile app and another app, typically for passing record data to the Salesforce mobile app or other apps. This object is available in API version 41.0 and later.

AppMenuItem

Represents the organization's default settings for items in the app menu or App Launcher.

AppointmentSchedulingPolicy

Represents a set of rules for scheduling appointments using Lightning Scheduler. This object is available in API version 45.0 and later.

Approval

Represents an approval request for a Contract.

AppTabMember

Represents the list of tabs for each of the available apps. This object is available in API version 43.0 and later.

Article Type__DataCategorySelection

A data category selection represents a data category that classifies an article. This object is available in API version 19.0 and later.

Asset

Represents an item of commercial value, such as a product sold by your company or a competitor, that a customer has purchased and installed.

AssetDowntimePeriod

Represents a period during which an asset is not able to perform as expected. Downtime periods include planned activities, such as maintenance, and unplanned events, such as mechanical breakdown. This object is available in API version 49.0 and later.

AssetOwnerSharingRule

Represents the rules for sharing an Asset with users other than the owner. This object is available in API version 33.0 and later.

AssetRelationship

Represents a non-hierarchical relationship between assets due to replacement, upgrade, or other circumstances.

AssetShare

Represents a sharing entry on an Asset. This object is available in API version 33.0 and later.

AssetTag

Associates a word or short phrase with an Asset.

AssetTokenEvent

The documentation has moved to AssetTokenEvent in the *Platform Events Developer Guide*.

AssetWarranty

Defines the warranty terms applicable to an asset along with any exclusions and extensions. This object is available in API version 50.0 and later.

AssignedResource

Represents a service resource who is assigned to a service appointment in Field Service and Lightning Scheduler. Assigned resources appear in the Assigned Resources related list on service appointments. This object is available in API version 38.0 and later.

AssignmentRule

Represents an assignment rule associated with a Case or Lead.

AssociatedLocation

Represents a link between an account and a location in Field Service. You can associate multiple accounts with one location. For example, a shopping center location may have multiple customer accounts.

AsyncApexJob

Represents an individual Apex sharing recalculation job, a batch Apex job, a method with the `future` annotation, or a job that implements `Queueable`. Use this object to query Apex batch jobs in your organization.

AsyncOperationLog

Represents an async operations log containing progress and status information about external synchronizations to the Omnichannel Inventory service. This object is available in API version 51.0 and later.

AttachedContentDocument

This read-only object contains all `ContentDocument` objects associated with an object.

AttachedContentNote

This read-only object contains all ContentNote objects associated with an object. This object is available in API version 35.0 and later.

Attachment

Represents a file that a User has uploaded and attached to a parent object.

Audience

Represents an audience that is defined by criteria and can be assigned and used for targeting in an Experience Cloud site. This object is available in API version 44.0 and later.

AuraDefinition

Represents an Aura component definition, such as component markup, a client-side controller, or an event. This object is available in API version 32.0 and later.

AuraDefinitionBundle

Represents a Lightning Aura component definition bundle, such as a component or application bundle. A bundle contains a Lightning Aura component definition and all its related resources. This object is available in API version 32.0 and later.

AuraDefinitionBundleInfo

For internal use only.

AuraDefinitionInfo

For internal use only.

AuthConfig

Represents authentication options for an org with a My Domain configured, an Experience Cloud site, or a custom domain. This object is available in API version 32.0 and later.

AuthConfigProviders

Represents an authentication provider that's configured in an organization. This object is a child of the AuthConfig object. This object is available in API version 32.0 and later.

AuthorizationForm

Represents the specific version and effective dates of a form that is associated with consent, such as a privacy policy or terms and conditions. This object is available in API version 46.0 and later.

AuthorizationFormConsent

Represents the date and way in which a user consented to an authorization form. This object is available in API version 46.0 and later.

AuthorizationFormDataUse

Represents the data use consented to in an authorization form. This object is available in API version 46.0 and later.

AuthorizationFormText

Represents an authorization form's text and language settings. This object is available in API version 46.0 and later.

AuthProvider

Represents an authentication provider (auth provider). An auth provider lets users log in to your Salesforce org from an external service provider, such as Facebook, Google, or GitHub.

AuthSession

The AuthSession object represents an individual user session in your organization. This object is available in versions 29.0 and later.

BackgroundOperation

Represents a background operation in an asynchronous job queue. This object is available in API version 35.0 and later.

BackgroundOperationResult

Stores error messages generated when running Async SOQL queries or importing data into big objects using Bulk API. This is a big object, available in API version 37.0 and later.

BatchApexErrorEvent

The documentation has moved to BatchApexErrorEvent in the *Platform Events Developer Guide*.

Bookmark

Represents a link between opportunities that share common information.

BrandTemplate

Letterhead for HTML EmailTemplate.

BriefcaseAssignment

Represents the assignment of a briefcase definition to selected users and user groups. This object is available in API version 50.0 and later.

BriefcaseDefinition

Represents a briefcase definition. A briefcase makes selected records available for users to view when they're offline in the Salesforce Field Service mobile app for iOS and Android. This object is available in API version 50.0 and later.

BriefcaseRule

Represents a rule that specifies records for a briefcase definition. This object is available in API version 50.0 and later.

BriefcaseRuleFilter

Represents a filter criteria for a briefcase rule. This object is available in API version 50.0 and later.

BusinessHours

Specifies the business hours of your support organization. Escalation rules are run only during these hours.

BusinessProcess

Represents a business process.

BusinessProcessDefinition

Setup object that stores information about stages in a customer lifecycle map. The stages are associated with surveys and questions created using Salesforce Surveys. This object is reserved for internal use, and is available in API version 49.0 and later.

BusinessProcessFeedback

Setup object that stores information about the survey and the question associated with each stage in a customer lifecycle map. Customer lifecycle maps are used to track the scores provided by customers across their lifecycle using Salesforce Surveys. This object is reserved for internal use, and is available in API version 49.0 and later.

BusinessProcessGroup

Setup object that stores information about customer lifecycle maps. Customer lifecycle maps are used to track the scores provided by customers across their lifecycle using Salesforce Surveys. This object is reserved for internal use, and is available in API version 49.0 and later.

BuyerGroupPricebook

Represents a buyer group price book used in Lightning B2B Commerce. This object is available in API version 48.0 and later.

Calendar

Represents a calendar. This can be a default user calendar, public calendar, resource calendar, or holiday calendar. This object is available in API version 45.0 and later.

CalendarView

These calendars can be created and assigned to users other than the creator. Available calendars include object, shared, public, resource, and user list calendars. Object calendars represent a calendar based on a Salesforce object, either standard or custom. This object is available in API version 51.0 and later.

CallCenter

Represents a call center, which is a logical representation of a single computer-telephony integration (CTI) system instance in an organization.

CallCoachConfigModifyEvent

Represents a Conversation Insights configuration change. This object is available in API version 49.0 and later.

CallCoachingMediaProvider

Represents the media provider for call recordings. This object is available in API version 49.0 and later.

CallDisposition

Represents a call result value that sales reps select when logging a call. This object is available in API version 47.0 and later.

CallDispositionCategory

Represents the call outcome of a phone call that is used in reports and branching criteria for sales cadences. This object is available in API version 47.0 and later.

CallTemplate

Represents a call script for users to read when making calls.

Campaign

Represents and tracks a marketing campaign, such as a direct mail promotion, webinar, or trade show.

CampaignInfluence

Represents the association between a campaign and an opportunity in Customizable Campaign Influence. This object is available in API version 37.0 and later.

CampaignInfluenceModel

This read-only object represents a campaign influence model in Customizable Campaign Influence. Use campaign influence models to group `CampaignInfluence` records created by a specific set of triggers and workflows that you define. The Primary Campaign Source influence model is the default model. This object is available in API version 37.0 and later.

CampaignMember

Represents the association between a campaign and either a lead or a contact.

CampaignMemberStatus

One or more member status values defined for a campaign.

CampaignOwnerSharingRule

Represents the rules for sharing a campaign with User records other than the owner or anyone above the owner in the role hierarchy.

CampaignShare

Represents a sharing entry on a Campaign.

CampaignTag

Associates a word or short phrase with a Campaign.

CardPaymentMethod

References a credit card or debit card payment method. This entity implements the PaymentMethod entity interface. This object is available in API version 48.0 and later.

CartCheckoutSession

Represents a checkout session used in Lightning B2B Commerce checkout. This object is available in API version 48.0 and later.

CartDeliveryGroup

Represents shipping information for the delivery of items in an order against a store built with B2B Commerce on Lightning Experience. This object is available in API version 49.0 and later.

CartDeliveryGroupMethod

Represents the selected delivery method for a cart delivery group used in Lightning B2B Commerce checkout. This object is available in API version 49.0 and later.

CartItem

Represents an item in a `WebCart` that's active in a store built with B2B Commerce on Lightning Experience. Cart item can be of type `Product` or `Charge`. This object is available in API version 49.0 and later.

CartTax

Represents taxes for a line item in a `WebCart` that's active in a store built with B2B Commerce on Lightning Experience. This object is available in API version 49.0 and later.

CartValidationOutput

Associate errors to cart entities, such as cart line items, delivery groups, and the like, in a store built with B2B Commerce on Lightning Experience. An example error is "Out of stock." Available in API version 49.0 and later.

Case

Represents a case, which is a customer issue or problem.

CaseArticle

Represents the association between a Case and a KnowledgeArticle. This object is available in API version 20.0 and later.

CaseComment

Represents a comment that provides additional information about the associated Case.

CaseContactRole

Represents the role that a given Contact plays on a Case.

CaseHistory

Represents historical information about changes that have been made to the associated Case.

CaseMilestone

Represents a milestone (required step in a customer support process) on a Case. This object is available in API version 18.0 and later.

CaseOwnerSharingRule

Represents the rules for sharing a case with users other than the owner.

CaseShare

Represents a sharing entry on a Case.

CaseSolution

Represents the association between a Case and a Solution.

CaseStatus

Represents the status of a Case, such as New, On Hold, or In Process.

CaseSubjectParticle

Represents the Social Business Rules custom format for the **Case Subject** field on cases created from inbound social posts. This object is available in API version 41.0 and later.

CaseTag

Associates a word or short phrase with a Case

CaseTeamMember

Represents a case team member, who works with a team of other users to help resolve a case.

CaseTeamRole

Represents a case team role. Every case team member has a role on a case, such as “Customer Contact” or “Case Manager.”

CaseTeamTemplate

Represents a predefined case team, which is a group of users that helps resolve a case.

CaseTeamTemplateMember

Represents a member on a predefined case team, which is a group of users that helps resolve cases.

CaseTeamTemplateRecord

The CaseTeamTemplateRecord object is a linking object between the Case and CaseTeamTemplate objects. To assign a predefined case team to a case (customer inquiry), create a CaseTeamTemplateRecord record and point the `ParentId` to the case and the `TeamTemplateId` to the predefined case team.

CategoryData

Represents a logical grouping of Solution records.

CategoryNode

Represents a tree of Solution categories.

CategoryNodeLocalization

When the Translation Workbench is enabled for your organization, the CategoryNodeLocalization object provides the translation of the label of a solution category.

ChannelObjectLinkingRule

Represents a rule for linking a channel interaction with an object (such as Lead or Contact). This object is available in API version 47.0 and later.

ChannelProgram

Represents a channel program that vendors use to market and sell their products through channel partners. This object is available in API version 41.0 and later.

ChannelProgramLevel

Represents a level, based on member experience, in a channel program. This object is available in API version 41.0 and later.

ChannelProgramMember

Represents a partner who is a member of a channel program. This object is available in API version 41.0 and later.

ChatterActivity

ChatterActivity represents the number of posts and comments made by a user and the number of comments and likes on posts and comments received by the same user. This object is available in API version 23.0 and later.

ChatterAnswersActivity

Represents the reputation of a User in Chatter Answers zones.This object is available in API version 25.0 and later.

ChatterAnswersReputationLevel

Represents a reputation level within a Chatter Answers zone. This object is available in API version 26.0 and later.

ChatterConversation

Represents a private conversation in Chatter, consisting of messages that conversation members have sent or received. This object is available in API version 23.0 and later.

ChatterConversationMember

Represents a member of a private conversation in Chatter. A member has either sent messages to or received messages from other conversation participants. This object is available in API version 23.0 and later.

ChatterExtension

Represents a Rich Publisher App that's integrated with the Chatter publisher. This object is available in API version 41.0 and later.

ChatterExtensionConfig

Configuration for the Chatter extension for Experience Cloud sites. This object is available in API version 41.0 and later.

ChatterMessage

Represents a message sent as part of a private conversation in Chatter. This object is available in API version 23.0 and later.

ClientBrowser

Represents a cookie added to the browser upon login, and also includes information about the browser application where the cookie was inserted. This object is available in version 28.0 and later.

CollaborationGroup

Represents a Chatter group. This object is available in API version 19.0 and later.

CollaborationGroupMember

Represents a member of a Chatter group. This object is available in API version 19.0 and later.

CollaborationGroupMemberRequest

Represents a request to join a private Chatter group. This object is available in API version 21.0 and later.

CollaborationGroupRecord

Represents the records associated with Chatter groups.

CollaborationInvitation

Represents an invitation to join Chatter, either directly or through a group. This object is available in API version 21.0 and later.

CollabUserEngagementMetric

Represents the user engagement metrics for a Quip thread in a Quip template or document. This object is available in API version 50.0 and later.

CollabUserEngmtRecordLink

Represents an association between a CollabUserEngagementMetric and a Salesforce record. It tracks which Salesforce record, such as an Account or Contact, is associated with the user engagement metric. This object is available in API version 50.0 and later.

ColorDefinition

Represents the color-related metadata for a custom tab. This object is available in API version 43.0 and later.

CombinedAttachment

This read-only object contains all notes, attachments, Google Docs, documents uploaded to libraries in Salesforce CRM Content, and files added to Chatter that are associated with a record.

CommerceEntitlementBuyerGroup

Represents the entitlement policy for a buyer group. This object is available in API version 49.0 and later.

CommerceEntitlementPolicy

Represents an entitlement policy, which determines what products and prices a user can see. This object is available in API version 49.0 and later.

CommerceEntitlementPolicyShare

Represents the entitlement rule for sharing products and prices with users other than the owner. This object is available in API version 49.0 and later.

CommerceEntitlementProduct

Represents the entitlement policy for a product. This object is available in API version 49.0 and later.

CommSubscription

Represents a customer’s subscription preferences for a specific communication. This object is available in API version 48.0 and later.

CommSubscriptionChannelType

Represents the engagement channel through which you can reach a customer for a communication subscription. This object is available in API version 48.0 and later.

CommSubscriptionConsent

Represents a customer’s consent to a communication subscription. This object is available in API version 48.0 and later.

CommSubscriptionTiming

Represents a customer's timing preferences for receiving a communication subscription. This object is available in API version 48.0 and later.

Community (Zone)

Represents a zone that contains Idea or Question objects.

ConnectedApplication

Represents a connected app and its details; all fields are read-only.

Consumption Rate

Consumption rates describe the billing rate for a range of usage within a consumption schedule. All consumption schedules require at least one consumption rate in order to rate usage on a usage product. This object is available in API version 45.0 and later.

Consumption Schedule

A consumption schedule organizes a set of consumption rates by which usage-based products are quoted and billed. This object is available in API version 45.0 and later.

Contact

Represents a contact, which is a person associated with an account.

ContactCleanInfo

Stores the metadata Data.com Clean uses to determine a contact record’s clean status. Helps you automate the cleaning or related processing of contact records. ContactCleanInfo includes a number of bit vector fields.

ContactPointAddress

Represents a contact’s billing or shipping address, which is associated with an individual or person account. This object is available in API version 49.0 and later.

ContactPointConsent

Represents a customer's consent to be contacted via a specific contact point, such as an email address or phone number. This object is available in API version 48.0 and later.

ContactPointEmail

Represents a contact’s email, which is associated with an individual or person account. This object is available in API version 48.0 and later.

ContactPointPhone

Represents a contact’s phone number, which is associated with an individual or person account. This object is available in API version 48.0 and later.

ContactPointTypeConsent

Represents consent for a contact point type, such as email or phone. This object is available in API version 45.0 and later.

ContactOwnerSharingRule

Represents the rules for sharing a contact with a User other than the owner.

ContactRequest

Represents a customer's request for support to get back to them about an issue. This object is available in API version 45.0 and later.

ContactRequestShare

Represents a list of access levels to a ContactRequest with an explanation of the access level. This object is available in API version 45.0 and later.

ContactShare

Represents a list of access levels to a Contact along with an explanation of the access level. For example, if you have access to a record because you own it, the `ContactAccessLevel` is `All` and `RowCause` is Owner.

ContactSuggestionInsight

Represents a suggestion for a new contact record. Available in API versions 45.0 and later.

ContactTag

Associates a word or short phrase with a Contact.

ContentAsset

Represents a Salesforce file that has been converted to an asset file in a custom app in Lightning Experience. Use asset files for org setup and configuration. Asset files can be packaged and referenced by other components. This object is available in API version 38.0 and later.

ContentBody

Represents the body of a file in Salesforce CRM Content or Salesforce Files. This object is available in API version 40.0 and later.

ContentDistribution

Represents information about sharing a document externally. This object is available in API version 32.0 and later.

ContentDistributionView

Represents information about views of a shared document. This read-only object is available in API version 32.0 and later.

ContentDocument

Represents a document that has been uploaded to a library in Salesforce CRM Content or Salesforce Files. This object is available in versions 17.0 and later for Salesforce CRM Content. This object is available in API version 21.0 and later for Salesforce Files.

ContentDocumentHistory

Represents the history of a document. This object is available in versions 17.0 and later.

ContentDocumentLink

Represents the link between a Salesforce CRM Content document or Salesforce file and where it's shared. A file can be shared with other users, groups, records, and Salesforce CRM Content libraries. This object is available in versions 21.0 and later for Salesforce CRM Content documents and Salesforce Files.

ContentDocumentListViewMapping

Represents an association between a ListView and a Quip ContentDocument. Applies to Quip file types only. Maintains the mapping between a list view and Quip document when the list view is exported to a newly created Quip document. This object is available in API version 44.0 and later.

ContentDocumentSubscription

Represents a subscription for a user following or commenting on a file in a library. This object is available in API version 42.0 and later.

ContentFolder

Represents a folder in a content library for adding files. This object is available in API version 34.0 and later.

ContentFolderItem

Represents a file (ContentDocument) or folder (ContentFolder) that resides in a ContentFolder in a ContentWorkspace. This object is available in API version 35.0 and later.

ContentFolderLink

Defines the association between a library and its root folder. This object is available in API version 34.0 and later.

ContentFolderMember

Defines the association between a file and a folder. This object is available in API version 34.0 and later.

ContentHubItem

Represents a file or folder in a Files Connect external data source, such as Microsoft SharePoint or OneDrive for Business. This object is available in API version 33.0 and later.

ContentHubRepository

Represents a Files Connect external data source such as Microsoft SharePoint or OneDrive for Business. This object is available in API version 33.0 and later.

ContentNote

Represents a note created with the enhanced note taking tool, released in Winter '16. This object is available in API version 32.0 and later.

ContentNotification

Represents a notification for a file. This object is available in API version 42.0 and later.

ContentTagSubscription

Represents a subscription for a user following a tag on a file. This object is available in API version 42.0 and later.

ContentUserSubscription

Represents a subscription for a user following another user. This object is available in API version 42.0 and later.

ContentVersion

Represents a specific version of a document in Salesforce CRM Content or Salesforce Files. This object is available in versions 17.0 and later for Salesforce CRM Content documents. This object is available in versions 20.0 and later for Salesforce Files.

ContentVersionComment

Represents a comment on a version of a file. This object is available in API version 42.0 and later.

ContentVersionHistory

Represents the history of a specific version of a document. This object is available in version 17.0 and later.

ContentVersionRating

Represents a rating on a version of a file. This object is available in API version 42.0 and later.

ContentWorkspace

Represents a content library. This object is available in versions 17.0 and later.

ContentWorkspaceDoc

Represents a link between a document and a public library in Salesforce CRM Content. This object is available in versions 17.0 and later.

ContentWorkspaceMember

Represents a member of a content library. This object is available in API version 40.0 and later.

ContentWorkspacePermission

Represents a library permission. This object is available in API version 40.0 and later.

ContentWorkspaceSubscription

Represents a subscription for a user following a library. This object is available in API version 42.0 and later.

Contract

Represents a contract (a business agreement) associated with an Account.

ContractContactRole

Represents the role that a given Contact plays on a Contract.

ContractLineItem

Represents a product covered by a service contract (customer support agreement). This object is available in API version 18.0 and later.

ContractStatus

Represents the status of a Contract, such as Draft, InApproval, Activated, Terminated, or Expired.

ContractTag

Associates a word or short phrase with a Contract.

Conversation

Represents a conversation between an end user and an agent. Available in API version 49.0 and later.

ConversationContextEntry

Represents the context of a message or an event in the chat history between an agent and a messaging user. This object is available in API version 47.0 and later.

ConversationEntry

Represents a message or an event in the chat history between an agent and a messaging user. This object is available in API version 43.0 and later.

ConversationParticipant

Represents an active participant in a conversation. A new ConversationParticipant record is created each time a participant joins a conversation. This object is available in API version 49.0 and later.

CorsWhitelistEntry

Cross-Origin Resource Sharing (CORS) enables web browsers to request resources from origins other than their own. For example, using CORS, JavaScript code at `https://www.example.com` could request a resource from `https://www.salesforce.com`. To access supported Salesforce APIs, Apex REST resources, and Lightning Out from JavaScript code in a web browser, add the origin serving the code to a Salesforce CORS allowlist.

CreditMemo

Represents a document that is used to adjust or rectify errors made in an invoice. The invoice has already been processed and sent to a customer. This object is available in API version 48.0 and later.

CreditMemoLine

Represents a partial or full application of a credit memo's balance against an invoice or invoice line. This object is available in API version 48.0 and later.

Crisis

Represents a major crisis event that affects an Employee in an InternalOrganizationUnit. This object is available in API version 48.0 and later. In API version 49.0 and later, this object supports reports, criteria-based sharing rules, and history tracking, plus you can exclude individual fields from custom page layouts.

CronJobDetail

Contains details about the associated scheduled job, such as the job's name and type. This object is available in API version 29.0 and later.

CronTrigger

Contains schedule information for a scheduled job. CronTrigger is similar to a cron job on UNIX systems. This object is available in API version 17.0 and later.

CspTrustedSite

Represents a CSP Trusted Site. The Lightning Component framework uses Content Security Policy (CSP) to impose restrictions on content. The main objective is to help prevent cross-site scripting (XSS) and other code injection attacks. To use third-party APIs that make requests to an external (non-Salesforce) server or to use a WebSocket connection, add a CSP Trusted Site. This object is available in API version 48.0 and later.

CurrencyType

Represents the currencies used by an organization for which the multicurrency feature is enabled.

CustomBrand

Represents a custom branding and color scheme. This object is available in API version 28.0 and later.

CustomBrandAsset

Represents a branding element in a custom branding scheme. For example, a color, logo image, header image, or footer text. A CustomBrandAsset can apply to an Experience Cloud site or to an org using the Salesforce mobile app. This object is available in API version 28.0 and later.

CustomHelpMenuItem

Represents the items within a section of the Lightning Experience help menu that the admin added to display custom, org-specific help resources. This object is available in API version 44.0 and later.

CustomHelpMenuSection

Represents a section of the Lightning Experience help menu that the admin added to display custom, org-specific help resources. This object is available in API version 44.0 and later.

CustomHttpHeader

Represents a custom HTTP header that provides context information from Salesforce such as region, org details, or the role of the person viewing the external object. This object is available in API version 43.0 and later.

CustomNotificationType

Stores information about custom notification types. This object is available in API version 47.0 and later.

CustomPermission

Represents a permission created to control access to a custom process or app, such as sending email. This object is available in API version 31.0 and later.

CustomPermissionDependency

Represents the dependency between two custom permissions when one custom permission requires that you enable another custom permission. This object is available in API version 32.0 and later.

DandBCompany

Represents a Dun & Bradstreet® company record, which is associated with an account added from Data.com. This object is available in API version 25.0 and later.

Dashboard

Represents a dashboard, which shows data from custom reports as visual components. Access is read-only. This object is available in API version 20.0 and later.

DashboardComponent

Represents a dashboard component, which can be a chart, metric, table, or gauge on a dashboard. Access is read-only. This object is available in API version 21.0 and later.

DashboardTag

Associates a word or short phrase with a Dashboard. This object is available in API version 20.0 and later.

DataAssessmentFieldMetric

Represents summary statistics for matched, blank, and differing fields in account records of an org compared to records in Data.com.This object is available in API version 37.0 and later.

DataAssessmentMetric

Represents a summary of statistics for fields matched and unmatched in your account records with Data.com account records.This object is available in API version 37.0 and later.

DataAssessmentValueMetric

Summarizes the number of fields matched for your account records with Data.com account records.This object is available in API version 37.0 and later.

DatacloudCompany

Represents the fields for Data.com company records. This object is available in API version 30.0 or later.

DatacloudContact

The fields and properties for Data.com contact records. This object is available in API version 30.0 or later.

DatacloudDandBCompany

Represents a set of read-only fields that are used to return D&B company data from Data.com API calls. This object is available in API version 30.0 or later.

DatacloudOwnedEntity

Represents fields in the DatacloudOwnedEntity object. The DatacloudOwnedEntity object tracks user-purchased records. This object is available in API version 30.0 or later.

DatacloudPurchaseUsage

Represents an object used to identify and track Data.com record purchases. This object is available in API version 30.0 or later.

DataIntegrationRecordPurchasePermission

Indicates Lightning Data purchase credits that a Salesforce admin has granted to users.

DatasetExport

Represents a dataset exported from Einstein Analytics. When a dataset is exported, the data is converted into a .csv file and the schema is stored in a separate JSON file. These files are stored in two objects: DatasetExport and DatasetExportPart. DatasetExport acts as the header and includes the JSON schema.

DatasetExportPart

Represents a dataset exported from Einstein Analytics. When a dataset is exported, the data is converted into a .csv file and the schema is stored in a separate JSON file. These files are stored in two objects: DatasetExport and DatasetExportPart. DatasetExportPart contains parts of the .csv file.

DataUseLegalBasis

Represents the legal basis for contacting a customer, such as billing or contract. This object is available in API version 45.0 and later.

DataUsePurpose

Represents the reason for contacting a prospect or customer, such as for billing, marketing, or surveys. This object is available in API version 45.0 and later.

DatedConversionRate

Represents the dated exchange rates used by an organization for which the multicurrency and the effective dated currency features are enabled.

DeclinedEventRelation

Represents event participants (invitees or attendees) with the status `Declined` for a given event. This object is available in API versions 29.0 and later.

DelegatedAccount

Represents the external managed account. This object is available in API version 49.0 and later.

DeleteEvent

Represents a record that has been soft deleted. Search on this object was available in API version 48.0, then removed in API version 50.0.

DigitalSignature

Represents a signature captured on a service report in field service.

DigitalWallet

The digital wallet entity represents a customer's digital wallet service. Commerce Payments can use a digital wallet as a payment source when processing payments through a payment gateway. This object is available in API version 48.0 and later.

DirectMessage

Represents a direct message conversation between multiple users in Chatter. This object is available in API version 38.0 and later.

Division

A logical segment of your organization's data. For example, if your company is organized into different business units, you could create a division for each business unit, such as "North America," "Healthcare," or "Consulting." Available only if the organization has the Division permission enabled.

DivisionLocalization

When the Translation Workbench is enabled for your organization, the DivisionLocalization object provides the translation of the label for a division.

Document

Represents a file that a user has uploaded. Unlike Attachment records, documents are not attached to a parent object.

DocumentAttachmentMap

Maps the relationship between an EmailTemplate and its attachment, which is stored as a Document.

DocumentTag

Associates a word or short phrase with a Document.

Domain

Read-only object that represents a custom Web address assigned to a site in your organization. This object is available in API version 26.0 and later.

DomainSite

Read-only junction object that joins together the Site and Domain objects. This object is available in API version 26.0 and later.

DsarPolicy

Represents a Data Subject Access Request (DSAR) policy created in the Privacy Center managed package. DSAR policies anonymize or transfer personal data from your org at your customer's request. This object is available in API version 50.0 and later.

DsarPolicyLog

Represents the history of Data Subject Access Request (DSAR) policy execution requests. This log records the status and results of executed DSAR policies for a customer. This object is available in API version 50.0 and later.

DuplicateJob

Represents an instance of a job that identifies duplicates among existing records in the system.

DuplicateJobDefinition

Setup object defining a job that identifies duplicate record items globally.

DuplicateJobMatchingRule

Represents a MatchingRule to be used with a DuplicateJob sharing the corresponding DuplicateJobMatchingRuleDefinition.

DuplicateJobMatchingRuleDefinition

Setup object specifying a MatchingRule to use with DuplicateJob instances that share a DuplicateJobDefinition.

DuplicateRecordItem

Represents an individual record that's part of a duplicate record set. Use this object to create custom report types.

DuplicateRecordSet

Represents a group of records that have been identified as duplicates. Each duplicate record set contains one or more duplicate record items. Use this object to create custom report types and view the results of duplicate jobs.

DuplicateRule

Represents a duplicate rule for detecting duplicate records.

ElectronicMediaGroup

Represents the type of media that you can associate with a product or category.This object is available in API version 49.0 and later.

ElectronicMediaUse

Represents the usage of media. This object is available in API version 49.0 and later.

EmailContent

Represents a marketing email asset for use with Pardot. This object is available in API version 50.0 and later.

EmailDomainFilter

Represents a filter that determines whether an email relay is restricted to a specific list of domains. This object is available in API version 43.0 and later.

EmailDomainKey

Represents a domain key for an organization's domain, used to authenticate outbound email that Salesforce sends on the organization's behalf. This object is available in API version 28.0 and later.

EmailMessage

Represents an email in Salesforce.

EmailMessageRelation

Represents the relationship between an email and contacts, leads, and users. This object is available in API version 37.0 and later.

EmailRelay

Represents the configuration for sending an email relay. An email relay routes email sent from Salesforce through your company's email servers. This object is available in API version 43.0 and later.

EmailServicesAddress

An email service address.

EmailServicesFunction

An email service.

EmailStatus

Represents the status of email sent.

EmailTemplate

Represents a template for mass email, or email sent when the activity history related list of a record is modified.

EmbeddedServiceDetail

Represents a metadata catalog object that exposes fields from the underlying Embedded Service setup objects defined in each EmbeddedServiceConfig deployment for guest users. Guest users don't have direct access to the Embedded Service setup objects. Available in API version 39.0 and later.

Employee

Represents an employee within a company or organization. This object is available in API version 48.0 and later. In API version 49.0 and later, this object supports reports, criteria-based sharing rules, and history tracking, plus you can exclude individual fields from custom page layouts.

EmployeeCrisisAssessment

Represents a crisis assessment of an Employee. This object is available in API version 48.0 and later. In API version 49.0 and later, this object supports reports, criteria-based sharing rules, and history tracking, plus you can exclude individual fields from custom page layouts.

EngagementChannelType

Represents a channel through which a customer can be reached for communication. This object is available in API version 48.0 and later.

EmbeddedServiceLabel

Represents a customized label in Embedded Chat or embedded Appointment Management.This object is available in API version 44.0 and later.

EnhancedLetterhead

Represents an enhanced letterhead that can be associated with a Lightning email template that doesn't use the Salesforce Merge Language (SML). This object is available in API version 46.0 and later.

Entitlement

Represents the customer support an account or contact is eligible to receive. This object is available in API version 18.0 and later. Entitlements may be based on an asset, product, or service contract.

EntitlementContact

Represents a Contact eligible to receive customer support via an Entitlement. This object is available in API version 18.0 and later.

EntitlementTemplate

Represents predefined terms of customer support for a product (Product2). This object is available in API version 18.0 and later.

EntityHistory

Represents historical information about an object's changed field values. This object is only available to users with the "View All Data" permission. This object is unavailable beginning with API version 8.0. Use the object-specific Historyobjects instead.

EntityMilestone

Represents a required step in a customer support process on a work order. The Salesforce user interface uses the term "object milestone." This object is available in API version 37.0 and later.

EntitySubscription

Represents a subscription for a user following a record or another user. This object is available in API version 34.0 and later.

EnvironmentHubMember

Represents a member organization in the Environment Hub. This object is available in API version 29.0 and later.

Event

Represents an event in the calendar. In the user interface, event and task records are collectively referred to as activities.

EventLogFile

Represents event log files for event monitoring. The event monitoring product gathers information about your Salesforce org's operational events, which you can use to analyze usage trends and user behavior. This object is available in API version 32.0 and later. The `Interval` and `Sequence` fields are available only in API version 37.0 and later.

EventRelation

Represents a person (a user, lead, or contact) or a resource (such as a conference room) invited to an event. This object lets you add or remove invitees from an event and use the API to manage invitees' responses to invitations. If Shared Activities is enabled, EventRelation can also represent other objects that are related to an event. EventRelation does not support triggers, workflow, or data validation rules.

EventBusSubscriber

Represents a trigger, process, or flow that's subscribed to a platform event or a change data capture event. Doesn't include CometD subscribers.

EventTag

Associates a word or short phrase with an Event.

EventWhoRelation

Represents the relationship between an event and a lead or contacts. This derived object is a filtered version of the EventRelation on page 1386 object; that is, IsParent is *`true`* and IsWhat is *`false`*. It doesn't represent relationships to invitees or to accounts, opportunities, or other objects. This object is available in API versions 29.0 and later.

Expense

Represents an expense linked to a work order. Service resource technicians can log expenses, such as tools or travel costs. This object is available in API version 49.0 and later.

ExpenseReport

Represents a report that summarizes expenses. This object is available in API version 50.0 and later.

ExpenseReportEntry

Represents an entry in an expense report. This object is available in API version 50.0 and later.

ExpressionFilter

Represents a logical expression that's used to control the execution of macro instructions. This object is available in API version 46.0 and later.

ExpressionFilterCriteria

Represents a condition in an expression that's used to control the execution of macro instructions. This object is available in API version 46.0 and later.

ExternalAccountHierarchy

Represents the external account hierarchy, which works like a role-based hierarchy. Use ExternalAccountHierarchy to allow partner and customer users to share data with other external accounts in their hierarchy.This object is available in API version 49.0 and later.

ExternalAccountHierarchyHistory

Represents the history of changes to values in the fields of an external account hierarchy. This object is available in API version 50.0 and later.

ExternalDataSource

Represents an external data source, which defines connection details for integration with data and content that are stored outside the Salesforce org. This object is available in API version 27.0 and later.

ExternalDataUserAuth

Stores authentication settings for a Salesforce user to access an external system. The external system must be defined in an external data source or a named credential that's configured to use per-user authentication. This object is available in API version 27.0 and later.

ExternalSocialAccount

Represents a managed social media account on a social network such as Facebook or Twitter. This object is available in API version 29.0 and later.

FeedAttachment

Represents an attachment to a feed item, such as a file attachment or a link. Use FeedAttachment to add various attachments to one feed item. This object is available in API version 36.0 and later.

FeedComment

Represents a comment added to a feed by a user. This object is available in API version 18.0 and later.

FeedItem

FeedItem represents an entry in the feed, such as changes in a record feed, including text posts, link posts, and content posts. This object is available in API version 21.0 and later. This object replaces FeedPost.

FeedLike

Indicates that a user has liked a feed item. This object is available in API version 21.0 and later.

FeedPollChoice

Shows the choices for a poll posted in the feed. This object is available in API version 29.0 and later.

FeedPollVote

Shows how users voted on a poll posted in the feed. This object is available in API version 29.0 and later.

FeedPost

FeedPost represents the following types of changes in a record feed, such as AccountFeed: text posts, link posts, and content posts. This object is available in API version 18.0 through 21.0. FeedPost is no longer available in later versions. Starting with API version 21.0, use FeedItem to represent text posts, link posts, and content posts in feeds.

FeedRevision

Holds the revision history of a specific feed item or comment, including a list of attributes that changed for each revision. This object is available in API version 34.0 and later.

feedSignal

Attach feed signals, like `UpDownVote`, `UserVerified`, and `Verified`, to a feed post or comment. This object is available in API version 41.0 and later.

FeedTrackedChange

Represents an individual field change or set of field changes. A FeedTrackedChange is a child object of a record feed, such as AccountFeed. This object is available in API version 18.0 and later.

FieldHistoryArchive

Represents field history values for all objects that retain field history. `FieldHistoryArchive` is a big object, available only to users with the "Retain Field History" permission. This object is available in API version 29.0 and later.

FieldPermissions

Represents the enabled field permissions for the parent PermissionSet. This object is available in API version 24.0 and later.

FieldSecurityClassification

Represents a field's data sensitivity value selected from the SecurityClassification picklist. This object is available in API version 46.0 and later.

FieldServiceMobileSettings

Represents a configuration of settings that control the Field Service iOS and Android mobile app experience. This object is available in API version 38.0 and later.

FiscalYearSettings

Settings to define a custom or standard fiscal year for your organization. This object has a parent-child relationship with the Period object.

FlexQueueItem

Represents an asynchronous Apex job in the Apex flex queue. Provides information about the job type and flex queue position of the AsyncApexJob. This object is available in API version 36.0 and later.

FlowDefinitionView

Represents the description of a flow definition. This object is available in API version 46.0 and later.

FlowInterview

Represents a flow interview. A *flow interview* is a running instance of a flow.

FlowInterviewOwnerSharingRule

Represents the rules for sharing a FlowInterview with users other than the owner. This object is available in API version 33.0 and later.

FlowInterviewShare

Represents a sharing entry on a FlowInterview. This object is available in API version 33.0 and later.

FlowRecordRelation

Represents a relationship between a record and a flow interview. When a flow interview is paused, Salesforce uses the $Flow.CurrentRecord global variable in the flow to associate the interview with a record. Available in API version 42.0 and later.

FlowStageRelation

Represents a relationship between a paused flow interview and its stages. When a flow interview is paused, Salesforce creates a FlowStageRelation record for each stage that's set to the `$Flow.CurrentStage` or `$Flow.ActiveStages` global variable. Available in API version 43.0 and later.

FlowVariableView

Represents a variable within the flow version. This object is available in API version 46.0 and later.

FlowVersionView

Represents the version of a flow definition. This object is available in API version 46.0 and later.

Folder

Represents a repository for a Dashboard, Document, EmailTemplate, Macro, QuickText, or Report. Only one type of item can be contained in a folder.

FolderedContentDocument

Represents the relationship between a parent and child ContentFolderItem in a ContentWorkspace.

ForecastingAdjustment

This object represents an individual forecast manager's adjustment for a subordinate's or child territory's forecast via a ForecastingItem. Available in API versions 26 and greater. This object is separate from the ForecastingOwnerAdjustment object, which represents forecast users' adjustments of their *own* forecasts, including territory forecasts they own.

ForecastingDisplayedFamily

Represents the table in Forecasts Settings where an admin selects the product families that users can forecast on in Lightning Experience. This object is available in API version 40.0 and later.

ForecastingFact

This is a read-only object linking a ForecastingItem with its opportunities, such as opportunities that share the same owner or forecast category and have a closing date within the period of the forecasting item. Available in API versions 26 and greater.

ForecastingItem

This is a read-only object used for individual forecast amounts. Users see amounts based on their perspectives and forecast roles. The amounts users see include one of the following when forecasting in revenue: `AmountWithoutAdjustments`, `AmountWithoutManagerAdjustment`, `ForecastAmount`, `OwnerOnlyAmount`. The amounts users see include one of the following when forecasting in quantity: `QuantityWithoutAdjustments`, `QuantityWithoutManagerAdjustment`, `ForecastQuantity`, `OwnerOnlyQuantity`. Available in API versions 26 and greater.

ForecastingOwnerAdjustment

This object represents an individual forecast user's adjustment of their *own* forecast, including territory forecasts they own, via a ForecastingItem. Available in API versions 33 and greater. This object is separate from the ForecastingAdjustment object, which represents managers' adjustments of *subordinates'* and child territories' forecasts.

ForecastingQuota

This object represents an individual user's or territory's quota for a specified time period. The "Manage Quotas" user permission is required for creating, updating, or deleting quotas. (Users can only edit their subordinates' or child territories' quotas, not their own.) The "View All Forecasts" permission is required to View any user's forecast, regardless of the forecast hierarchy. Available in API versions 25 and greater. Forecast managers can view the forecasts of subordinates and territories below them in the forecast hierarchy.

ForecastingShare

Represents forecasts shared between a forecast manager and a user. Available in API version 44.0 and later.

ForecastingType

This object is used to identify the forecast type associated with `ForecastingAdjustment`, `ForecastingOwnerAdjustment`, `ForecastingQuota`, `ForecastingFact`, and `ForecastingItem` objects. Available in API versions 30.0 and greater.

ForecastingUserPreference

Represents the forecasting selections that a user has made, such as display options, date range, forecasting type, and currency.

FormulaFunction

Represents a function used when building a formula, including examples and uses. This object is available in API version 47.0 and later.

FormulaFunctionAllowedType

Represents the functions that are supported in the given formula context. This object is available in API version 48.0 and later.

FormulaFunctionCategory

Represents the category to which a formula belongs when building a formula. This object is available in API version 47.0 and later.

FulfillmentOrder

Represents a group of products and delivery charges on a single order that share the same fulfillment location, delivery method, and recipient. The FulfillmentOrderLineItems belonging to a FulfillmentOrder are associated with OrderItemSummary objects belonging to a single OrderSummary. This object is available in API version 48.0 and later.

FulfillmentOrderItemAdjustment

Represents a price adjustment on a FulfillmentOrderLineItem. Corresponds to an OrderItemAdjustmentLineSummary associated with the corresponding OrderItemSummary. This object is available in API version 48.0 and later.

FulfillmentOrderItemTax

Represents the tax on a FulfillmentOrderLineItem or FulfillmentOrderItemAdjustment. Corresponds to an OrderItemTaxLineItemSummary. This object is available in API version 48.0 and later.

FulfillmentOrderLineItem

Represents a product or delivery charge belonging to a FulfillmentOrder. Corresponds to an OrderItemSummary. This object is available in API version 48.0 and later.

FunctionInvocationRequest (Beta)

Represents invocation information for a Salesforce Function. This object is available in API version 51.0 and later.

GtwyProvPaymentMethodType

The gateway provider payment method type allows integrators and payment providers to choose an active payment to receive an order's payment data rather than allowing the Salesforce Order Management platform to select a default payment method. This object is available in API version 50.0 and later.

Goal

The Goal object represents the components of a goal such as its name, description, and status.

GoalLink

Represents the relationship between two goals. This is a many-to-many relationship, meaning that each goal can link to many other goals.

GoogleDoc

Represents a link to a Google Document. This object is available in API version 14.0 and later.

Group

A set of User records.

GroupMember

Represents a User or Group that is a member of a public group.

GuestBuyerProfile

Represents a store's guest buyer profile, which allows unauthenticated buyers to browse the store. This object is available in API version 51.0 and later.

HashtagDefinition

HashtagDefinition represents hashtag (#) topics in public Chatter posts and comments. Public posts and comments include those on profiles and in public groups, but not those on records or in private groups. This object is available in API version 26.0 and later.

HealthCareDiagnosis

Represents information related to industry-standard healthcare diagnosis codes.

HealthCareProcedure

Represents information related to industry-standard healthcare procedure codes.

Holiday

Represents a period of time during which your customer support team is unavailable. Business hours and escalation rules associated with business hours are suspended during any holidays with which they are affiliated.

IconDefinition

Represents the icon-related metadata for a custom tab. This object is available in API version 43.0 and later.

Idea

Represents an idea on which users are allowed to comment and vote, for example, a suggestion for an enhancement to an existing product or process. This object is available in API version 12 and later.

IdeaComment

Represents a comment that a user has submitted in response to an idea.

IdeaReputation

Represents a collection of statistics and scores derived from a user's activity within an Ideas zone or internal organization. This object is available in API version 28.0 and later.

IdeaReputationLevel

Represents a reputation level within an Ideas zone or internal organization and is used by the system to calculate reputation. You can create up to 25 levels per zone or internal organization. This object is available in API version 28.0 and later.

IdeaTheme

Represents an invitation to zone members to submit ideas that are focused on a specific topic. This object is available in API version 26 and later.

IdpEventLog

Represents the Identity Provider Event Log. This log records both problems and successes with inbound SAML or OpenID Connect authentication requests from another app provider. It also records outbound SAML responses when Salesforce is acting as an identity provider. This object is available in API version 39.0 and later.

IframeWhiteListUrl

Represents a list of trusted external domains that you allow to frame your Embedded Service, Surveys, and Visualforce pages. This object is available in API version 45.0 and later.

Image

Represents the details of an image. This object is available in API version 47.0 and later.

Individual

Represents a customer's data privacy and protection preferences. Data privacy records based on the Individual object store your customers' preferences. Data privacy records are associated with related leads, contacts, person accounts, and users. This object is available in API version 42.0 and later.

IndividualHistory

Represents the history of changes to values in the fields of a data privacy record, based on the Individual object. This object is available in versions 42.0 and later.

IndividualShare

Represents a list of access levels to a data privacy record along with an explanation of the access level. For example, if you have access to a record because you own it, the `IndividualAccessLevel` is `All` and `RowCause` is Owner. This object is available in API version 42.0 and later.

InternalOrganizationUnit

Represents an organization that an Employee belongs to. This object is available in API version 48.0 and later. In API version 49.0 and later, this object supports reports, criteria-based sharing rules, and history tracking, plus you can exclude individual fields from custom page layouts.

Invoice

Represents a financial document describing the total amount a buyer must pay for goods or services provided. This object is available in API version 48.0 and later.

InvoiceLine

Represents the amount that a buyer must pay for a product, service, or fee. Invoice lines are created based on the amount of an order line. This object is available in API version 48.0 and later.

JobProfile

Represents a job profile used for shift scheduling. This object is available in API versions 47.0 and later.

Knowledge__Feed

Represents the feed for a knowledge article. This object is available in API version 39.0 and later.

Knowledge__ka

Provides access to the concrete object that represents a Knowledge article, the parent object for article versions. This object is available in API version 39.0 and later.

Knowledge__kav

Provides access to the concrete object that represents a Knowledge article version. This object is available in API version 39.0 and later.

Knowledge__DataCategorySelection

Represents a data category that classifies an article. This object is available in API version 39.0 and later.

KnowledgeableUser

Represents a user identified as knowledgeable about a specific topic, and ranks them relative to other knowledgeable users. This object is available in API version 31.0 and later.

KnowledgeArticle

Provides read-only access to an article and the ability to delete the master article. This object is available in API version 19.0 and later.

KnowledgeArticleVersion

Provides a global view of standard article fields across all types of articles depending on their version. This object is available in API version 18.0 and later.

KnowledgeArticleVersionHistory

Enables read-only access to the full history of an article. This object is available in API version 25.0 and later.

KnowledgeArticleViewStat

Provides statistics on the number of views for the specified article across all article types. This object is read-only and available in API version 20.0 and later.

KnowledgeArticleVoteStat

Provides the weighted rating for the specified article on a scale of 1 to 5 across all article types. This object is read-only and available in API version 20.0 and later.

LandingPage

Represents a Pardot landing page that has been synced to Salesforce. A landing page is a web page that a visitor reaches after clicking a link or advertisement. This object is available in API version 42.0 and later.

Lead

Represents a prospect or lead.

LeadCleanInfo

Stores the metadata Data.com Clean uses to determine a lead record’s clean status. Helps you automate the cleaning or related processing of lead records.

LeadOwnerSharingRule

Represents the rules for sharing a lead with users other than the owner.

LeadShare

Represents a sharing entry on a Lead.

LeadStatus

Represents the status of a Lead, such as Open, Qualified, or Converted.

LeadTag

Associates a word or short phrase with a Lead.

LegalEntity

Represents the way an organization is structured. An organization can be a single legal entity or it can comprise more than one legal entity. This object is available in API version 48.0 and later.

LightningExperienceTheme

Represents information for a theme in Lightning Experience. This object is available in API Version 42.0 and later.

LightningOnboardingConfig

Represents the feedback provided when users switch from Lightning Experience to Salesforce Classic. Admins can customize the question, how frequently the form appears, and where the feedback is stored in Chatter from the Adoption Assistance page in Lightning Experience Setup. Available in API version 47.0 and later.

LightningToggleMetrics

Represents users who switched from Lightning Experience back to Salesforce Classic. This object is available in API version 43.0 and later.

LightningUsageByAppTypeMetrics

Represents number of users on Lightning Experience and Salesforce Mobile. This object is available in API version 43.0 and later.

LightningUsageByBrowserMetrics

Represents Lightning Experience usage grouped by user's browser. This object is available in API version 43.0 and later.

LightningUsageByPageMetrics

Represents standard pages users viewed most frequently in Lightning Experience. This object is available in API version 43.0 and later.

LightningUsageByFlexiPageMetrics

Represents custom pages users viewed most frequently in Lightning Experience. This object is available in API version 43.0 and later.

LightningExitByPageMetrics

.Represents standard pages users switched from Lightning Experience to Salesforce most frequently. This object is available in API version 44.0 and later.

LinkedArticle

Represents a knowledge article that is attached to a work order, work order line item, or work type. This object is available in API version 37.0 and later.

LinkedArticleFeed

Represents the comment feed on a linked article. This object is available in API version 39.0 and later.

LinkedArticleHistory

Represents the history of changes made to tracked fields on a linked article. This object is available in API version 37.0 and later.

ListEmail

Represents a list email sent from Salesforce, or sent from Pardot and synced to Salesforce. When the list email is sent, the recipients are generated by combining recipients in ListEmailIndividualRecipients and ListEmailRecipientSource. Duplicate and other invalid recipients are removed. The result is the recipients who are actually sent any given list email. Has a one-to-many relationship with ListEmailRecipientSource and ListEmailIndividualRecipient. This object is available in API version 41.0 and later.

ListEmailIndividualRecipient

For a list email in Salesforce, represents a recipient. Each record represents a link from a list email to exactly one recipient for that list email. Recipients can be contacts, leads, or campaign members. Has a one-to-many relationship with ListEmail.This object is available in API version 44.0 and later.

ListEmailRecipientSource

For a list email in Salesforce, represents the dynamically defined sources of recipient email addresses. Each record represents a link to a single list view or campaign that is examined when the list email is sent. Has a one-to-many relationship with ListEmail. This object is available in API version 41.0 and later.

ListView

Represents a list view. A list view specifies a set of records for an object, based on specific criteria. This object is available in API version 32.0 and later.

ListViewChart

Represents a graphical chart that's displayed on Salesforce for Android, iOS, and mobile web list views. The chart aggregates data that is filtered based on the list view that's currently displayed. This object is available in API version 33.0 and later.

ListViewChartInstance

Retrieves metadata for all standard and custom charts for a given entity in context of a given list view. This object is available in API versions 34.0 and later.

LiveAgentSession

This object is automatically created for each Chat session and stores information about the session. This object is available in API versions 28.0 and later.

LiveAgentSessionHistory

This object is automatically created for each Chat session and stores information about changes made to the session. This object is available in API versions 28.0 and later.

LiveAgentSessionShare

This object is automatically created for each Chat session and stores information about the session. This object is available in API versions 28.0 and later.

LiveChatBlockingRule

Represents a rule for blocking chat visitors' IP addresses from starting new chats with agents. This object is available in API version 34.0 and later.

LiveChatButton

Represents a button that allows visitors to request chats with Chat users. This object is available in API version 24.0 and later.

LiveChatButtonDeployment

Associates an automated chat invitation with a specific deployment. This object is available in API versions 28.0 and later.

LiveChatButtonSkill

Represents all the skills available to a LiveChatButton except the one currently assigned. To retrieve the skill currently assigned, query LiveChatButton. This object is available in API version 25.0 and later.

LiveChatDeployment

Represents the general settings for deploying Live Agent on a website. This object is available in API version 24.0 and later.

LiveChatSensitiveDataRule

Represents a rule for masking or deleting data of a specified pattern. Written as a regular expression (regex). This object is available in API version 35.0 and later.

LiveChatTranscript

This object is automatically created for each Live Agent chat session and stores information about the session. This object is available in API version 24.0 and later.

LiveChatTranscriptEvent

Captures specific events that occur over the lifetime of a chat. This object is available in API version 24.0 and later.

LiveChatTranscriptShare

Represents a sharing entry on a LiveChatTranscript object. This object is available in API version 24.0 and later.

LiveChatTranscriptSkill

Represents a join between LiveChatTranscript and Skill. This object is available in API version 25.0 and later.

LiveChatUserConfig

Represents a setting that controls the console settings for Chat users. This object is available in API version 24.0 and later.

LiveChatUserConfigProfile

Represents a join between LiveChatUserConfig and Profile. This object is available in API version 24.0 and later.

LiveChatUserConfigUser

Represents a join between Live Chat User Config and User. This object is available in API version 24.0 and later.

LiveChatVisitor

Represents a website visitor who has started or tried to start a chat session. This object is available in API version 24.0 and later.

Location

Represents a warehouse, service vehicle, work site, or other element of the region where your team performs field service work. In API version 49.0 and later, you can associate activities with specific locations. Activities, such as the tasks and events related to a location, appear in the activities timeline when you view the location detail page. Also in API version 49.0 and later, Work.com users can view Employees as a related list on Location records.

LocationGroup

Represents a group of Omnichannel Inventory locations, providing an aggregate view of inventory availability across those locations. Omnichannel Inventory can create an inventory reservation for an order at the location group level, then assign the reservation to one or more locations in the group as needed. This object is available in API version 51.0 and later.

LocationGroupAssignment

Represents the assignment of a location to a location group. This object is available in API version 51.0 and later.

LocationTrustMeasure

Represents the COVID safety protocols that your business follows. For example, enforcement of masks, social distancing, cleanliness, and capacity limits. This object is available in API version 50.0 and later.

LocWaitlistMsgTemplate

Represents a junction object connecting LocationWaitlist to MessagingTemplate. This object is available in API version 50.0 and later.

LocationWaitlist

Represents a queue created for a specific location. Multiple queues can be created for a single location. For example, you can have a queue for each sales agent or a standard queue and a queue for vulnerable groups. The specific party of people in a queue is represented by LocationWaitlistedParty. This object is available in API version 50.0 and later.

LocationWaitlistedParty

Represents a specific party of people waiting in a queue. This object is available in API version 50.0 and later.

LoginEvent

The documentation has moved to LoginEvent in the *Platform Events Developer Guide*.

LoginGeo

Represents the geographic location of the user's IP address for a login event. Due to the nature of geolocation technology, the accuracy of geolocation fields (for example, country, city, postal code) may vary. This object is available in API version 34.0 and later.

LoginHistory

Represents the login history for all successful and failed login attempts for organizations and enabled portals. This object is available in API version 21.0 and later.

LoginIp

Represents a validated IP address. This object is available in version 28.0 and later.

LogoutEventStream

The documentation has moved to LogoutEventStream in the *Platform Events Developer Guide*.

LookedUpFromActivity

This read-only object is displayed as a related list on an activity record (an event or a task); the list contains records that have custom lookup relationships from the activity to another object. This object is not queryable.

Macro

Represents a macro, which is a set of instructions that tells the system to perform one or more tasks. This object is available in API version 32.0 and later.

MacroInstruction

Represents an instruction in a macro. An instruction can specify the object that the macro interacts with, the context or publisher that the macro works within, the operation or action that the macro performs, and the target of the macro's actions.

MacroUsage

Represents macro usage on a record, including which macro was used, who used it, and how they used it. This object is available in API version 47.0 and later.

MailmergeTemplate

Represents a mail merge template (a Microsoft Word document) used for performing mail merges for your organization.

MaintenanceAsset

Represents an asset covered by a maintenance plan in field service. Assets can be associated with multiple maintenance plans.

MaintenancePlan

Represents a preventive maintenance schedule for one or more assets in field service.

MaintenanceWorkRule

Represents the recurrence pattern for a maintenance record. This object is available in API version 49.0 and later.

ManagedContentInfo

Allows the creation of relationship to Product using ProductMedia. This object is available in API version 49.0 and later.

MarketingForm

Represents a Pardot marketing form that has been synched to Salesforce. Use forms on your website and landing pages to collect information about visitors and turn anonymous visitors into identified prospects. This object is available in API version 42.0 and later.

MarketingLink

Represents a Pardot marketing link record, either a custom redirect or a file, that has been synced to Salesforce. This object is available in API version 42.0 and later.

MatchingRule

Represents a matching rule that is used to identify duplicate records. This object is available in API version 33.0 and later.

MatchingRuleItem

Represents criteria used by a matching rule to identify duplicate records. This object is available in API version 33.0 and later.

MessagingChannel

Represents a communication channel that an end user can use to send a message to an agent. A communication channel can be an SMS number, a Facebook page, or another supported messaging channel. This object is available in API version 45.0 and later.

MessagingChannelSkill

Junction object that represents an association between MessagingChannel and Skill. This object is available in API version 45.0 and later.

MessagingConfiguration

Represents the details for a Messaging configuration. This object is available in API version 47.0 and later.

MessagingDeliveryError

Represents a log of triggered outbound failures to verify when a triggered outbound has failed. This object is available in API version 44.0 and later.

MessagingEndUser

Represents a single address—such as a phone number or Facebook page—communicating with a single Messaging channel. This object is available in API version 45.0 and later

MessagingLink

Represents the link between a Messaging Channel and where it's shared. This object is available in API version 47.0 and later.

MessagingSession

Represents a session on a Messaging channel. This object is available in API version 47.0 and later.

MessagingTemplate

Represents a Messaging template used to send pre-formatted messages. This object is available in API version 47.0 and later.

MetadataPackage

Represents a package that has been developed in the org you're logged in to. Applies to unlocked, unmanaged, first-generation, and second-generation managed packages.

MetadataPackageVersion

Represents a package version (managed or unmanaged) that has been uploaded from the org you're logged in to.

Metric

The Metric object represents the components of a goal metric such as its name, metric type, and current value.

MetricDataLink

The link between the metric and the data source, such as a report.

MetricsDataFile

Represents a data file containing usage metrics on all installations of a managed package in a Salesforce instance. This object is available in API version 30.0 and later.

MilestoneType

Represents a milestone (required step in a customer support process). This object is available in API version 18.0 and later.

MLField

Represents a single field in a data definition. This object is available in API version 50.0 and later.

MlIntentUtteranceSuggestion

Represents a customer input, used for training purposes in the feedback loop process of a conversation. Admins can add these inputs to the intent training model. This object is available in API version 51.0 and later.

MLPredictionDefinition

Represents a prediction definition that specifies details about the prediction. This object is available in API version 50.0 and later.

MLRecommendationDefinition

For internal use only.

MobileSettingsAssignment

Represents the assignment of a particular field service mobile settings configuration to a user profile. This object is available in API version 41.0 and later.

MsgChannelLanguageKeyword

Represents the consent configuration for a Messaging channel. This object is available in API version 48.0 and later.

MyDomainDiscoverableLogin

Represents configuration settings when the My Domain login page type is Discovery. Login Discovery provides an identity-first login experience, where the login page contains the identifier field only. Based on the identifier entered, a handler determines how to authenticate the user. This object is available in API version 45.0 and later.

MutingPermissionSet

Represents a set of disabled permissions and is used in conjunction with PermissionSetGroup . This object is available in API version 46.0 and later.

Name

Non-queryable object that provides information about foreign key traversals when the foreign key has more than one parent.

NamedCredential

Represents a named credential, which specifies the URL of a callout endpoint and its required authentication parameters in one definition. A named credential can be specified as an endpoint to simplify the setup of authenticated callouts. This object is available in API version 33.0 and later.

NamespaceRegistry

Represents a namespace that you can link to scratch orgs that were created from your org's Dev Hub. You use the namespace when developing, packaging, and releasing an app. You can't create this object with the API. Use the **Link Namespace** action in the Dev Hub graphical interface to insert a `NamespaceRegistry` record. This object is available in API version 41.0 and later.

NavigationLinkSet

Represents the navigation menu in an Experience Cloud site. A navigation menu consists of items that users can click to go to other parts of the site. This object is available in API version 35.0 and later.

NavigationMenuItem

Represents a single menu item in a NavigationLinkSet. Use this object to create, delete, or update menu items in your Experience Cloud site's navigation menu. This object is available in API version 35.0 and later.

NavigationMenuItemLocalization

Represents the translated value of a navigation menu item in an Experience Cloud site. This object is available in API version 36.0 and later.

Network

Represents an Experience Cloud site. Salesforce Experience Cloud lets you create branded spaces for your employees, customers, and partners. You can customize and create experiences, whether they're communities, sites, or portals, to meet your business needs, then transition seamlessly between them. Experience Cloud sites let you share information, records, and files with coworkers and stakeholders all in one place. This object is available in API version 26.0 and later.

NetworkActivityAudit

Represents an audit trail of moderation actions in Experience Cloud sites. This object is available in API version 30.0 and later.

NetworkAffinity

Represents a junction object that associates a user profile with a Network object, that is, with an Experience Cloud site. Use NetworkAffinity to assign a default Experience Cloud site to a user profile. This object is available in API version 41.0 and later.

NetworkDiscoverableLogin

Represents the Login Discoverable page from where customers and partners log in to an Experience Cloud site. Customers and partners are users with an External Identity license or any communities license for Experience Cloud.This object is available in API version 44.0 and later

NetworkFeedResponseMetric

Represents an object that stores the date and time values of question posts. It captures information for question creation, answer creation, and when an answer is marked as best answer This object is available in API version 51.0 and later.

NetworkMember

Represents a member of an Experience Cloud site. Members can be either users in your company or external users with portal profiles. This object is available in API version 26.0 and later.

NetworkMemberGroup

Represents a group of members in an Experience Cloud site. Members can be either users in your internal org or external users assigned portal profiles. An administrator adds members to an Experience Cloud site by adding a profile or a permission set, and any user with the profile or permission set becomes a member of the site. This object is available in API version 26.0 and later.

NetworkModeration

Represents a flag on an item in a community. This object is available in API version 30.0 and later.

NetworkPageOverride

Represents information about custom pages used to override the default pages in Experience Cloud sites. You can create Experience Builder or Visualforce pages and override the default pages in a site. Using custom pages allows you to create a more personalized experience for your users. This object is available in API version 34.0 and later.

NetworkSelfRegistration

Represents the account that self-registering Experience Cloud users are associated with by default. Self-registering users in an Experience Cloud site are required to be associated with an account, which the administrator must specify while setting up self-registration for the site. If an account isn't specified, Salesforce creates person accounts (when enabled) for self-registering users. This object is available in API version 34.0 and later.

NetworkUserHistoryRecent

Represents an Experience Cloud site user's history of accessed records. This object is available in API version 42.0 and later.

Note

Represents a note, which is text associated with a custom object or a standard object, such as a Contact, Contract, or Opportunity.

NoteAndAttachment

This read-only object contains all notes and attachments associated with an object.

NoteTag

Associates a word or short phrase with a Note.

OauthCustomScope

Represents a permission defining the protected data that a connected app can access from an external entity when Salesforce is the OAuth authorization provider.

OauthCustomScopeApp

Represents the name of the connected app to which the custom scope is assigned. This object is available in API version 49.0 and later.

OauthToken

Represents an OAuth access token for connected app authentication. Use this object to create a user interface for token management. This object is available in API version 32.0 and later.

ObjectPermissions

Represents the enabled object permissions for the parent PermissionSet. This object is available in API version 24.0 and later.

ObjectTerritory2AssignmentRule

Represents a territory assignment rule that's associated with an object, such as Account. ObjectTerritory2AssignmentRuleItem can only be created or deleted if the BooleanFilter field on its corresponding ObjectTerritory2AssignmentRule is `null`. Available only if Enterprise Territory Management has been enabled for your organization.

ObjectTerritory2AssignmentRuleItem

A single row of selection criteria for an ObjectTerritory2AssignmentRule object. ObjectTerritory2AssignmentRuleItem can only be created or deleted if the `BooleanFilter` field on its corresponding ObjectTerritory2AssignmentRule object is a `null` value. Available only if Enterprise Territory Management has been enabled for your organization.

ObjectTerritory2Association

Represents an association (by assignment) between a territory and an object record, such as an account. Available only if Enterprise Territory Management has been enabled for your Salesforce org.

OmniDataTransform

For internal use only.

OmniDataTransformItem

For internal use only.

OmniInteractionConfig

For internal use only.

OmniProcess

For internal use only.

OmniProcessCompilation

For internal use only.

OmniProcessElement

For internal use only.

OmniScriptSavedSession

For internal use only.

OmniUiCard

For internal use only.

OpenActivity

This read-only object is displayed in a related list of open activities—future events and open tasks—related to an object. It includes activities for all contacts related to the object. OpenActivity fields for phone calls are only available if your organization uses Salesforce CRM Call Center.

OperatingHours

Represents the hours in which a service territory, service resource, or account is available for field service work in Field Service and Lightning Scheduler. This object is available in API version 38.0 and later.

OperatingHoursHistory

Represents the history of changes made to tracked fields on an operating hours record. This object is available in API version 38.0 and later.

Opportunity

Represents an opportunity, which is a sale or pending deal.

OpportunityCompetitor

Represents a competitor on an Opportunity.

OpportunityContactRole

Represents the role that a Contact plays on an Opportunity.

OpportunityContactRoleSuggestionInsight

Represents a suggestion for a new opportunity contact role. Available in API versions 45.0 and later.

OpportunityFieldHistory

Represents the history of changes to the values in the fields of an opportunity. This object is available in versions 13.0 and later.

OpportunityHistory

Represents the stage history of an Opportunity.

OpportunityInsight

Represents an individual insight (deal prediction, follow-up reminder, or key moment) related to an opportunity record.

OpportunityLineItem

Represents an opportunity line item, which is a member of the list of Product2 products associated with an Opportunity.

OpportunityLineItemSchedule

Represents information about the quantity, revenue distribution, and delivery dates for a particular OpportunityLineItem.

OpportunityOwnerSharingRule

Represents a rule for sharing an opportunity with users other than the owner.

OpportunityPartner

This object represents a partner relationship between an Account and an Opportunity. An OpportunityPartner record is created automatically when a Partner record is created for a partner relationship between an account and an opportunity.

OpportunityShare

Represents a sharing entry on an Opportunity.

OpportunitySplit

OpportunitySplit credits one or more opportunity team members with a portion of the opportunity amount. This object is available in API version 16.0 and later for pilot customers, and version 28.0 and later for others.

OpportunitySplitType

OpportunitySplitType provides unique labels and behavior for each split type. This object is available in API version 28.0 and later.

OpportunityStage

Represents the stage of an Opportunity in the sales pipeline, such as New Lead, Negotiating, Pending, Closed, and so on.

OpportunityTag

Associates a word or short phrase with an Opportunity.

OpportunityTeamMember

Represents a User on the opportunity team of an Opportunity.

Order

Represents an order associated with a contract or an account.

OrderAdjustmentGroup

Group containing a set of adjustments applied to an order. This object is available in API version 48.0 and later.

OrderAdjustmentGroupSummary

Represents the current properties and state of a group of related price adjustments. Associated with a set of OrderItemAdjustmentLineSummaries that apply to OrderItemSummaries belonging to one OrderSummary. Corresponds to one or more order adjustment group objects, consisting of an original object and any change objects applicable to it. This object is available in API version 48.0 and later.

OrderDeliveryGroup

A group of order items that share a delivery method and address. The delivery method and address are used during the fulfillment process, such as shipping as a gift, downloading, picking up in store, or shipping to a standard address This object is available in API version 48.0 and later.

OrderDeliveryGroupSummary

Represents the current properties and state of a group of OrderItemSummaries, belonging to one OrderSummary, to be fulfilled using the same delivery method and delivered to the same address. A single shipment can include them all, but that is not guaranteed. Corresponds to one or more order delivery group objects, consisting of an original object and any change objects applicable to it. This object is available in API version 48.0 and later.

OrderDeliveryMethod

Shows the customizations and options that a buyer selected for their delivery method. This object is available in API version 48.0 and later.

OrderHistory

Represents historical information about changes that have been made to the standard fields of the associated order, or to any custom fields with history tracking enabled.

OrderItem

Represents an order product that your organization sells.

OrderItemAdjustmentLineItem

An adjustment that has been made to an order item. This object is available in API version 48.0 and later.

OrderItemAdjustmentLineSummary

Represents the current properties and state of price adjustments on an OrderItemSummary. Corresponds to one or more order item adjustment line item objects, consisting of an original object and any change objects applicable to it. This object is available in API version 48.0 and later.

OrderItemSummary

Represents the current properties and state of a product or charge on an OrderSummary. Corresponds to one or more order item objects, consisting of an original object and any change objects applicable to it. This object is available in API version 48.0 and later.

OrderItemSummaryChange

Represents a change to an OrderItemSummary, usually a reduction in quantity due to a cancel or return. Corresponds to a change order item. This object is available in API version 48.0 and later.

OrderItemTaxLineItem

The tax amount that has been applied to an order item. This object is available in API version 48.0 and later.

OrderItemTaxLineItemSummary

Represents the current tax on an OrderItemSummary or OrderItemAdjustmentLineSummary. Corresponds to one or more order item tax line items, consisting of an original object and any change objects applicable to it. This object is available in API version 48.0 and later.

OrderItemType

Shows whether the order product is a product line or charge line. This object is available in API version 48.0 and later.

OrderOwnerSharingRule

Represents a rule which determines order sharing access for the order’s owners.

OrderPaymentSummary

Represents the current properties and state of payments using a single payment method that are applied to one OrderSummary. This object is available in API version 48.0 and later.

OrderShare

Represents a sharing entry on an Order. This object is available in API version 48.0 and later.

OrderStatus

Represents the status of the order entity. This object is available in API version 48.0 and later.

OrderSummary

Represents the current properties and state of an order. Corresponds to one or more order objects, consisting of an original object and any change objects applicable to it. This object is available in API version 48.0 and later.

OrderSummaryRoutingSchedule

Represents an attempt to route an order summary to one or more inventory locations for fulfillment. You can use it to schedule future attempts and to record completed attempts. This object is available in API version 51.0 and later.

Organization

Represents key configuration information for an organization.

OrgDeleteRequest

Represents a request to delete a developer edition (DE) org. This object is available in API version 42.0 and later. It is available only in Developer and Database.com editions.

OrgWideEmailAddress

Represents an organization-wide email address for user profiles.

OutOfOffice

Represents a user-set value on a profile that shows when the user intends to be out of the office. This object is available in API version 41.0 and later.

OutgoingEmail

For internal use only.

OutgoingEmailRelation

For internal use only.

OwnedContentDocument

Represents a file owned by a user. This object is available in version 30.0 and later.

OwnerChangeOptionInfo

Represents default and optional actions that can be performed when a record's owner is changed. Available in API version 35.0 and later, but to query for change owner metadata, use the OwnerChangeOptionInfo object in Tooling API instead. For more information, see OwnerChangeOptionInfo in the Tooling API.

PackageLicense

Represents a license for an installed managed package. This object is available in API version 31.0 and later.

PackagePushError

Represents an error encountered during a push request. The number of PackagePushError records created depends on the number of push jobs in the request that result in an error.

PackagePushJob

Represents an individual push job for upgrading a package in an org from one version to another version. There can be multiple push jobs created for one push request. For example, if you want to upgrade five orgs as part of one push, you have one PackagePushRequest record and five PackagePushJob records.

PackagePushRequest

Represents the push request for upgrading a package in one or many orgs from one version to another version.

PackageSubscriber

Represents an installation of a package in an org. This object contains installation information for managed or unlocked packages developed in the org you're logged in to.

Partner

Represents a partner relationship between two Account records or between an Opportunity record and an Account record.

PartnerFundAllocation

Represents allocated funds from a partner marketing budget for channel partners. This object is available in API version 41.0 and later.

PartnerFundClaim

Represents a claim of funds from the partner marketing budget by a channel partner. This object is available in API version 41.0 and later.

PartnerFundRequest

Represents a request for funds from the partner marketing budget by a channel partner. This object is available in API version 41.0 and later.

PartnerMarketingBudget

Represents a budget that provides funds to channel partners for selling and marketing products and services. This object is available in API version 41.0 and later.

PartnerNetworkConnection

Represents a Salesforce to Salesforce connection between Salesforce organizations.

PartnerNetworkRecordConnection

Represents a record shared between Salesforce organizations using Salesforce to Salesforce.

PartnerNetworkSyncLog

Represents the Org Sync Log tab in Salesforce, where Salesforce administrators can track the replication of record inserts and updates being performed in Organization Sync. The Connection Detail page for the replication connection also displays the Org Sync Log's twenty most recent entries, and provides a link to the log.

PartnerRole

Represents a role for an account Partner, such as consultant, supplier, and so on.

PartyConsent

Represents consent preferences for an individual. This object is available in API version 48.0 and later.

Payment

Represents a single event where the customer creates a payment. For credit cards, this is a payment capture or payment sale, which won't show up in the end user's credit card statement. This object is available in API version 48.0 and later.

PaymentAuthAdjustment

Shows information about an adjustment made to an authorized transaction. This object is available in API version 51.0 and later.

PaymentAuthorization

Represents a single payment authorization event where users can capture or reverse a payment against a reserve of funds. This object is available in API version 48.0 and later.

PaymentGateway

Platform entity that represents the connection to the external payment gateway. This object is available in API version 48.0 and later.

PaymentGatewayLog

Stores information exchanged between the Salesforce payments platform and external payment gateways. Gateway logs can also record payloads from external payment entities. This object is available in API version 48.0 and later.

PaymentGatewayProvider

Setup entity for payment gateways. Defines the connection to a payment gateway Apex adapter. This object is available in API version 48.0 and later.

PaymentGroup

Top-level object that groups of all the payment transactions that have been processed an order or contract. PaymentGroup is a standalone object, so it isn't required for users to execute payment transactions (authorizations, captures, refunds, and sales). This object is available in API version 48.0 and later.

PaymentLineInvoice

Represents a payment allocated to or unallocated from an invoice. This object is available in API version 48.0 and later.

PaymentMethod

The method that a buyer uses to compensate the seller of a good or service. Common payment methods include cash, checks, credit or debit cards, money orders, bank transfers, and online payment services. This object is available in API version 48.0 and later.

PendingServiceRouting

Represents a work assignment that's waiting to be routed. This object is available in API version 40.0 and later.

Period

Represents a fiscal period defined in FiscalYearSettings.

PermissionSet

Represents a set of permissions that's used to grant more access to one or more users without changing their profile or reassigning profiles. This object is available in API version 22.0 and later.

PermissionSetAssignment

Represents the association between a User and a PermissionSet. This object is available in API version 22.0 and later.

PermissionSetGroup

Represents a group of permission sets and the permissions within them. Use permission set groups to organize permissions based on job functions or tasks. Then, you can package the groups as needed. This object is available in API version 45.0 and later.

PermissionSetGroupComponent

A junction object that relates the PermissionSetGroup and PermissionSet objects via their respective IDs; enables permission set group recalculation to determine the aggregated permissions for the group. This object is available in API version 45.0 and later.

PermissionSetLicense

Represents a license that's used to enable one or more users to receive a specified permission without changing their profile or reassigning profiles. You can use permission set licenses to grant access, but not to deny access. This object is available in API version 29.0 and later.

PermissionSetLicenseAssign

Represents the association between a User and a PermissionSetLicense. This object is available in API version 29.0 and later.

PermissionSetTabSetting

Represents a permission set tab setting. Requires the View Setup permission. Use this object to query all tab settings of the permission set. This object is available in API version 45.0 and later.

PersonalizationTargetInfo

Represents a target for an audience. This object is available in API version 47.0 and later.

PlatformAction

PlatformAction is a virtual read-only object. It enables you to query for actions displayed in the UI, given a user, a context, device format, and a record ID. Examples include standard and custom buttons, quick actions, and productivity actions.

PlatformEventUsageMetric

Contains usage data for event publishing and CometD-client delivery. Usage data is available for the last 24 hours, ending at the last hour, and for historical daily usage. PlatformEventUsageMetric contains separate usage metrics for platform events and change data capture events. This object is available in API version 50.0 and later.

PlatformStatusAlertEvent

The documentation has moved to PlatformStatusAlertEvent in the *Platform Events Developer Guide*.

PortalDelegablePermissionSet

PortalDelegablePermissionSet is a base platform object used to store permission sets that can be assigned by a delegated portal/external user admin (DPUA) to portal users. This object is available in API version 47.0 and later.

PresenceConfigDeclineReason

Represents the settings for a decline reason that a presence user provides when declining work. This object is available in API version 37.0 and later.

PresenceDeclineReason

Represents an Omni-Channel decline reason that agents can select when declining work requests. This object is available in API version 37.0 and later.

PresenceUserConfig

Represents a configuration that determines a presence user's settings. This object is available in API version 32.0 and later.

PresenceUserConfigProfile

Represents a configuration that determines the settings that are assigned to presence users who are assigned to a specific profile. User-level configurations override profile-level configurations. This object is available in API version 32.0 and later.

PresenceUserConfigUser

Represents a configuration that determines the settings that are assigned to a presence user. These user-level configurations override profile-level configurations. This object is available in API version 32.0 and later.

PriceAdjustmentSchedule

Represents a series of tiered discounts based on the number of items purchased. This object is available in API version 47.0 and later.

PriceAdjustmentTier

Represents a discount tier in a price adjustment schedule. This object is available in API version 47.0 and later.

Pricebook2

Represents a price book that contains the list of products that your org sells.

Pricebook2History

Represents historical information about changes that have been made to the standard fields of the associated Pricebook2, or to any custom fields with history tracking enabled. This object is available in API version 51.0 and later.

PricebookEntry

Represents a product entry (an association between a Pricebook2 and Product2) in a price book.

PricebookEntryAdjustment

Read-only junction object created when you associate a price adjustment schedule with a price book entry. This object is available in API version 47.0 and later.

ProcessDefinition

Represents the definition of a single approval process.

ProcessException

Represents a processing failure on an order summary. A separate process is required to resolve the failure that caused the process exception before order summary processing can continue. This object is available in API version 50.0 and later.

ProcessInstance

Represents an instance of a single, end-to-end approval process. Use this and the node, step, and workitem process instance objects to create approval history reports.

ProcessInstanceHistory

This read-only object shows all steps and pending approval requests associated with an approval process (ProcessInstance).

ProcessInstanceStep

Represents one work item in an approval process (ProcessInstance).

ProcessInstanceNode

Represents a step in an instance of an approval process. Compare to ProcessNode, which describes the step in a process definition. Use this object to retrieve approval history.

ProcessInstanceWorkitem

Represents a user's pending approval request.

ProcessNode

Describes a step in a process definition. Compare to ProcessInstanceNode, which describes the step in a running process.

Product2

Represents a product that your org sells.

ProductAttribute

Represents the attributes that can be associated with a product. This object is available in API version 50.0 and later.

ProductAttributeSet

Represents a group of attributes that can be associated with a product. This object is available in API version 50.0 and later.

ProductAttributeSetItem

Represents a set of attributes that can be associated with a product. This object is available in API version 50.0 and later.

ProductAttributeSetProduct

Represents the product associated with a set of attributes. This object is available in API version 50.0 and later.

Product2DataTranslation

Represents the translated values of the data stored within a Product2 record's fields. This object is available in API version 45.0 and later.

ProductCategory

Represents the category that products are organized in.This object is available in API version 49.0 and later.

ProductCategoryDataTranslation

Represents the translated values for the data stored within a ProductCategory record's fields. This object is available in API version 46.0 and later.

ProductConsumed

Represents an item from your inventory that was used to complete a work order or work order line item in field service.

ProductEntitlementTemplate

Represents predefined terms of customer support (Entitlement) that users can add to products (Product2).

ProductItem

Represents the stock of a particular product at a particular location in field service, such as all bolts stored in your main warehouse.

ProductItemTransaction

Represents an action taken on a product item in field service. Product item transactions are auto-generated records that help you track when a product item is replenished, consumed, or adjusted.

ProductMedia

Represents the rich media, including images and attachments, that can be added to products.This object is available in API version 49.0 and later.

ProductRequest

Represents an order for a part or parts in field service.

ProductRequestLineItem

Represents a request for a part in field service. Product request line items are components of product requests.

ProductRequired

Represents a product that is needed to complete a work order or work order line item in field service.

ProductServiceCampaign

Represents a set of activities to be performed on a product service campaign asset, such as a product recall for safety issues or product defects. This object is available in API version 51.0 and later.

ProductServiceCampaignItem

Represents a product service campaign's asset. This object is available in API version 51.0 and later.

ProductServiceCampaignItemStatus

Represents a status for a product service campaign item in field service. This object is available in API version 51.0 and later.

ProductServiceCampaignStatus

Represents a status for a product service campaign in field service. This object is available in API version 51.0 and later.

ProductTransfer

Represents the transfer of inventory between locations in field service.

ProductWarrantyTerm

Defines the relationship between a product or product family and warranty term. This object is available in API version 50.0 and later.

Profile

Represents a profile, which defines a set of permissions to perform different operations. Operations can include querying, adding, updating, or deleting information, and so forth.

ProfileSkill

Represents a profile skill, which describes a user's professional knowledge. This is a global record for the organization, and users are associated through the ProfileSkillUser object.

ProfileSkillEndorsement

Represents a detail relationship of ProfileSkillUser. An endorsement of a profile skill shows approval and support of another user's publicly declared skill.

ProfileSkillShare

Represents a sharing entry on a ProfileSkill.

ProfileSkillUser

Represents a detail relationship of User. The object connects profile skills with users.

Prompt

Represents record details about an in-app guidance prompt or walkthrough. Available in API version 46.0 and later.

PromptAction

Represents how the user interacted with the in-app guidance prompt or walkthrough. Available in API version 46.0 and later.

PromptActionOwnerSharingRule

Represents a rule which determines `PromptAction` sharing access for the owners. Available in API version 46.0 and later.

PromptActionShare

Represents a sharing entry on a prompt action record. Available in API version 46.0 and later.

PromptLocalization

Represents the translated value of a label for record details about in-app guidance when the Translation Workbench is enabled for your org. Available in API version 48.0 and later.

PromptVersion

Represents an in-app guidance prompt or walkthrough. Available in API version 46.0 and later.

PromptVersionLocalization

Represents the translated value of a label for-app guidance when the Translation Workbench is enabled for your org. Available in API version 48.0 and later.

PushTopic

Represents a query that is the basis for notifying Streaming API clients of changes to records in an org. This object is available in API version 21.0 and later.

QueueRoutingConfig

Represents the settings that determine how work items are routed to agents. This object is available in API version 32.0 and later.

Question

Represents a question in a zone that users can view and reply to.

QuestionDataCategorySelection

A data category selection represents a data category that classifies a question.

QuestionReportAbuse

Represents a user-reported abuse on a Question in a Chatter Answers zone. This object is available in API version 24.0 and later.

QuestionSubscription

Represents a subscription for a user following a Question. This object is available in API version 24.0 and later.

QueueSobject

Represents the mapping between a queue Group and the sObject types associated with the queue, including custom objects.

QuickText

This object stores a snippet of text that allows users to send a quick response to a customer. Use quick text to create greetings, answers to common questions, short notes, and more. This object is available in API version 24.0 and later.

QuickTextUsage

Represents the usage of quick text on a record, including which quick text was used, who used it, and how they used it. This object is available in API version 47.0 and later.

Quote

The Quote object represents a quote, which is a record showing proposed prices for products and services. Available in API version 18.0 and later.

QuoteDocument

Represents a quote in document format. Available in API version 18.0 and later.

QuoteLineItem

The QuoteLineItem object represents a quote line item, which is a member of the list of Product2 products associated with a Quote, along with other information about those line items on that quote. Available in API version 18.0 and later.

RecentlyViewed

Represents records or list views that the current user has recently viewed or referenced (by viewing a related record). List views are available in API version 29.0 and later.

Recommendation

Represents the recommendations surfaced as offers and actions for Einstein Next Best Action. This object is available in API version 45.0 and later.

RecordAction

Represents a relationship between a record and an action, such as a flow. Create a RecordAction for every action that you want to associate with a particular record. Available in API version 42.0 and later.

RecordActionHistory

Represents the lifecycle of a RecordAction as it goes through different states. Available in API version 44.0 and later.

RecordsetFilterCriteria

Represents a set of filters on service appointment fields to associate with shifts. Only service appointments that satisfy the filter criteria are assigned to those shifts. This object is available in API version 50.0 and later.

RecordsetFilterCriteriaRule

Represents a rule on a service appointment filter for shifts. This is associated with the RecordsetFilterCriteria object. This object is available in API version 50.0 and later.

RecordType

Represents a record type.

RecordTypeLocalization

Represents the translated value of a label for a record type when the Translation Workbench is enabled for your organization.

RecordVisibility (Pilot)

Represents the visibility attributes that determine a record's read access. This object is read only and is available in API version 46.0 and later.

RedirectWhitelistUrl

Represents a trusted URL that users can navigate to without being shown a warning message. This object is available in API version 48.0 and later.

Refund

Represents a refund made against a payment. This object is available in API version 48.0 and later.

RefundLinePayment

A refund line that has been applied to a payment. This object is available in API version 48.0 and later.

RegisteredExternalService

Represents a registered external service used for checkout integrations by data integrators. This object is available in API version 49.0 and later.

RemoteKeyCalloutEvent

The documentation has moved to RemoteKeyCalloutEvent in the *Platform Events Developer Guide*.

Reply

Represents a reply that a user has submitted to a question in an answers zone.

ReplyReportAbuse

Represents a user-reported abuse on a Reply in a Chatter Answers zone. This object is available in API version 24.0 and later.

ReplyText

A text reply generated by Einstein Reply Recommendations that is based on closed chat transcripts. Admins review replies and publish them to quick text, editing them as needed. Einstein recommends relevant published replies to support agents in the Lightning Service Console, and agents can insert replies into chats or messaging sessions. This object is available in API version 49.0 and later.

Report

Represents a report, a set of data that meets certain criteria, displayed in an organized way. Access is read-only. This object is available in API version 20.0 and later.

ReportTag

Associates a word or short phrase with a Report. This object is available in API version 20.0 and later.

ReputationLevel

Represents a reputation level defined for an Experience Cloud site. This object is available in API version 32.0 and later.

ReputationLevelLocalization

Represents the translated value of a reputation level. Reputation level localization only applies for reputation levels in Experience Cloud sites. This object is available in API version 35.0 and later.

ReputationPointsRule

Represents the reputation point rules for an Experience Cloud site. Each rule specifies an action that members can earn points from and the points associated with those actions in a particular site. This object is available in API version 32.0 and later.

ResourceAbsence

Represents a time period in which a service resource is unavailable to work in Field Service and Lightning Scheduler. This object is available in API version 38.0 and later.

ResourcePreference

Represents an account’s preference for a specified service resource on field service work.

ReturnOrder

Represents the return or repair of inventory or products in Field Service, or the return of order products in Order Management. This object is available in API version 42.0 and later.

ReturnOrderItemAdjustment

Represents a price adjustment on a return order line item. This object is available in API version 50.0 and later.

ReturnOrderItemTax

Represents the tax on a return order line item or return order item adjustment. This object is available in API version 50.0 and later.

ReturnOrderLineItem

Represents a specific product that is returned or repaired as part of a return order in Field service, or a specific order item that is returned as part of a return order in Order Management. This object is available in API version 42.0 and later.

ReturnOrderOwnerSharingRule

Represents the rules for sharing a return order with user records other than the owner or anyone above the owner in the role hierarchy. This object is available in API version 42.0 and later.

RuleTerritory2Association

Represents a record-assignment rule and its association to an object, such as Account. Available only if Enterprise Territory Management has been enabled for your organization.

SalesAIScoreCycle

Represents the cycle type and ID used to score records. This object is available in API version 47.0 and later.

SalesAIScoreModelFactor

Represents the factors that Sales Cloud Einstein uses to build a scoring model. Scoring models are used by features, such as Opportunity Scoring, to score individual records. This object is available in API version 47.0 and later.

SalesChannel

Represents the origin of an order. For example, a web storefront, physical store, marketplace, or mobile app. Usually you will set up a SalesChannel for each Site in your B2C Commerce implementation. This object is available in API version 48.0 and later.

SalesStoreCatalog

Represents the catalog associated with a store. This object is available in API version 49.0 and later.

SalesWorkQueueSettings

Represents settings used to customize work queue options for third-party scoring. Third-party scoring enables custom number fields on person accounts, contacts, and leads. You must be a High Velocity Sales customer to update this object. Previously, you could only use the Einstein Intelligence Score for third-party scoring. Available starting in Version 47.0.

SamlSsoConfig

Represents a SAML Single Sign-On configuration. This object is available in API version 32.0 and later.

Scontrol

A custom s-control, which is custom content that is hosted by the system but executed by the client application.

ScontrolLocalization

The translated value of the field label for an s-control.

ScratchOrgInfo

Represents a scratch org and its audit log. Use this object to create a scratch org and keep a log of its creation and deletion. This object is available in API version 41.0 and later.

SearchPromotionRule

Represents a promoted search term, which is one or more keywords that you associate with a Salesforce Knowledge article. When a user's search query includes these keywords, the associated article is returned first in search results. This object is available in API version 31.0 and later.

SecureAgent

Represents a Secure Agent that connects Salesforce to on-premises external data sources like SharePoint 2010 and 2013. This object is available in API version 32.0 and later.

SecureAgentsCluster

Represents a cluster consisting of several Secure Agents on different servers. Clusters provide failover protection if an agent on a particular server becomes inaccessible. This object is available in API version 35.0 and later.

SecurityCustomBaseline

Provides the ability to read, create, and delete user-defined custom security baselines, which define an org's security standards. This object is available in API version 39.0 and later.

SelfServiceUser

Represents a Contact who has been enabled to use your organization's Self-Service portal, where he or she can obtain online support.

ServiceAppointment

Represents an appointment to complete work for a customer in Field Service and Lightning Scheduler. This object is available in API version 38.0 and later.

ServiceAppointmentStatus

Represents a possible status of a service appointment in field service.

ServiceChannel

Represents a channel of work items that are received from your organization—for example, cases, chats, or leads. This object is available in API version 32.0 and later.

ServiceChannelFieldPriority

Represents a secondary routing priority field-value mapping. This object is available in API version 47.0 and later.

ServiceChannelStatus

Represents the status that's associated with a specific service channel. This object is available in API version 32.0 and later.

ServiceChannelStatusField

Represents the values that you use to indicate completed and in-progress work item status for the status field in the Status-Based Capacity routing model. This object is available in API version 49.0 and later.

ServiceContract

Represents a customer support contract (business agreement). This object is available in API version 18.0 and later.

ServiceContractOwnerSharingRule

Represents the rules for sharing a ServiceContract (customer service agreement) with users other than the owner. This object is available in API version 18.0 and later.

ServiceCrew

Represents a group of service resources who can be assigned to service appointments as a unit.

ServiceCrewMember

Represents a technician service resource that belongs to a service crew.

ServiceCrewOwnerSharingRule

Represents the rules for sharing a service crew with user records other than the owner or anyone above the owner in the role hierarchy.

ServicePresenceStatus

Represents a presence status that can be assigned to a service channel. This object is available in API version 32.0 and later.

ServiceReport

Represents a report that summarizes a work order, work order line item, or service appointment.

ServiceReportLayout

Represents a service report template in field service.

ServiceResource

Represents a service technician or service crew in field service in Field Service and Lightning Scheduler. This object is available in API version 38.0 and later.

ServiceResourceCapacity

Represents the maximum number of scheduled hours or number of service appointments that a capacity-based service resource can complete within a specific time period. This object is available in API version 38.0 and later.

ServiceResourceCapacityHistory

Represents the history of changes made to tracked fields on a service resource capacity record. This object is available in API version 38.0 and later.

ServiceResourceOwnerSharingRule

Represents the rules for sharing a service resource with user records other than the owner or anyone above the owner in the role hierarchy. This object is available in API version 38.0 and later.

ServiceResourceSkill

Represents a skill that a service resource possesses in Field Service and Lightning Scheduler. This object is available in API version 38.0 and later.

ServiceTerritory

Represents a geographic or functional region in which field service work can be performed in Field Service and Lightning Scheduler. This object is available in API version 38.0 and later.

ServiceTerritoryLocation

Represents a location associated with a particular service territory in field service.

ServiceTerritoryMember

Represents a service resource who can be assigned to service appointments in a service territory in Field Service and Lightning Scheduler. This object is available in API version 38.0 and later.

ServiceTerritoryWorkType

Represents the relationship between a ServiceTerritory object and a WorkType object for Lightning Scheduler appointments. This object is available in API version 45.0 and later.

SessionPermSetActivation

The SessionPermSetActivation object represents a permission set assignment activated during an individual user session. When a SessionPermSetActivation object is inserted into a permission set, an activation event fires, allowing the permission settings to apply to the user's specific session. This object is available in API versions 37.0 and later.

SetupAuditTrail

Represents changes you or other admins made in your org's Setup area for at least the last 180 days. This object is available in API version 15.0 and later.

SetupEntityAccess

Represents the enabled setup entity access settings (such as for Apex classes) for the parent PermissionSet. This object is available in API version 25.0 and later.

ShapeRepresentation

Contains information about the shape of an org. The shape of an org includes features, settings, licenses, and limits information. You can easily create scratch orgs based on a source org's shape. This object is available in API version 50.0 and later.

SharingRecordCollection

Represents a collection of records. This object is available in API version 51.0 and later.

SharingRecordCollectionItem

Represents a single record in a collection of records. This object is available in API version 51.0 and later.

SharingRecordCollectionMember

Represents a user with access to a collection of records. This object is available in API version 51.0 and later.

Shift

Represents a shift for service resource scheduling. Available in API versions 46.0 and later.

ShiftHistory

Represents the history of changes made to tracked fields on a time sheet. Available in API versions 46.0 and later.

ShiftOwnerSharingRule

Represents the rules for sharing a shift with user records other than the owner or anyone above the owner in the role hierarchy. Available in API versions 46.0 and later.

ShiftShare

Represents a sharing entry on a field service shift. Available in API versions 46.0 and later.

ShiftStatus

Represents a shift, such as Tentative, Published, or Confirmed. Available in API versions 46.0 and later.

Shipment

Represents the transport of inventory in field service or a shipment of order items in Order Management.

ShipmentItem

Represents an order item included in a shipment. This object is available in API version 51.0 and later.

SignupRequest

Represents a request for a new signup. This object is available in API version 27.0 and later.

Site

Represents a public website that is integrated with an org. This object is available in API version 16.0 and later.

SiteDetail

Represents the details of a Salesforce site or Experience Cloud site. Available in API Version 38.0 and later.

SiteDomain

SiteDomain is a read-only object, and a one-to-many replacement for the Site.TopLevelDomain field. This object is available in API version 21.0, and has been deprecated as of API version 26.0. In API version 26.0 and later, use the Domain and DomainSite objects instead.

SiteHistory

Represents the history of changes to the values in the fields of a site. This object is generally available in API version 18.0 and later.

SiteIframeWhitelistUrl

Represents a list of external domains that you allow to frame your Salesforce site or Experience Cloud site pages. This object is available in API version 44.0 and later.

Skill

Represents a category or group that Chat users or field service resources can be assigned to. This object is available in API version 24.0 and later.

SkillProfile

Represents a join between Skill and Profile. This object is available in API version 24.0 and later.

SkillRequirement

Represents a skill that is required to complete a particular task in Field Service and Lightning Scheduler. Skill requirements can be added to work types, work orders, and work order line items in Field Service and Lightning Scheduler. This object is available in API version 38.0 and later. You also can add skill requirements to work items in Omni-Channel skills-based routing using API version 42.0 and later.

SkillUser

Represents a join between Skill and User. This object is available in API version 24.0 and later.

SlaProcess

Represents an entitlement process associated with an Entitlement. This object is available in API version 19.0 and later.

Snippet

Represents a snippet, which is a container for rich text that can be reused across Pardot emails and email templates. This object is available in API version 47.0 and later.

SnippetAssignment

Represents a relationship between a snippet and a campaign. Assignments are required to use snippet content in Pardot emails and email templates. A snippet can be assigned to more than one campaign. This object is available in API version 47.0 and later.

SocialPersona

Represents a snapshot of a contact's profile on a social network such as Facebook or Twitter. This object is available in API version 22.0 and later.

SocialPost

Represents a snapshot of a post on a social network such as a Facebook or Twitter. This object is available in API version 23.0 and later.

Solution

Represents a detailed description of a customer issue and the resolution of that issue.

SolutionStatus

Represents the status of a Solution, such as Draft, Reviewed, and so on.

SolutionTag

Associates a word or short phrase with a Solution.

SOSDeployment

Represents the general settings for deploying SOS video call capability in a native mobile application. This object is available in API version 34.0 and later.

SOSSession

This object is automatically created for each SOS session and stores information about the session. This object is available in API versions 34.0 and later.

SOSSessionActivity

Captures information about specific events that occur during an SOS video call, such as when an SOS call begins or ends. This object is available in API version 34.0 and later.

Stamp

Represents a User Specialty. This object is available in API version 39.0 and later.

StampAssignment

Represents assignment of a User Specialty to a user. This object is available in API version 39.0 and later.

StaticResource

Represents a static resource that can be used in Visualforce markup.

StoreIntegratedService

Represents an association between an integration and a store. This object is available in API version 49.0 and later.

StreamingChannel

Represents a channel that is the basis for notifying listeners of generic Streaming API events. This object is available in API version 29.0 and later.

Salesforce Surveys Object Model

Learn about how Salesforce Surveys objects relate to one another in Salesforce.

Survey

Represents a survey.

SurveyEmailBranding

Represents the configuration settings for invitation emails sent to survey participants for a particular survey.

SurveyEngagementContext

Represents the context based on which a survey invitation was sent or a survey response was received. This object is available in API version 49.0 and later.

SurveyInvitation

Represents the invitation sent to a participant to complete the survey.

SurveyPage

Represents a page, such as the title page or a question page, in a survey.

SurveyQuestion

Represents a question in a survey.

SurveyQuestionChoice

Represents an answer choice that a participant can select for a survey question.

SurveyQuestionResponse

Represents a participant's answer to a specific question.

SurveyQuestionScore

Represents the aggregate of responses for the following question types: date, multiple choice, picklist, radio, ranking, rating, scoring, slider, and Net Promoter Score® (NPS®).

SurveyResponse

Represents information about a participant's response to a survey, such as the status of the response, the participant's location, and when the survey was completed.

SurveySubject

Represents a relationship between a survey and another object, such as an account or a case.

SurveyVersion

Represents a version of a survey.

SurveyVersionAddlInfo

Represents additional information about a survey version. This information defines the default settings of a survey version. This object is available in API version 49.0 and later.

TabDefinition

Represents a custom tab. Returns only the tabs that the current user has access to. This object is available in API version 43.0 and later.

TagDefinition

Defines the attributes of child Tag objects.

Task

Represents a business activity such as making a phone call or other to-do items. In the user interface, Task and Event records are collectively referred to as activities.

TaskPriority

Represents the importance or urgency of a Task, such as High, Normal, or Low.

TaskRelation

Represents the relationship between a task and a lead, contacts, and other objects related to the task. If Shared Activities is enabled, this object doesn't support triggers, workflow, or data validation rules. This object is available in API version 24.0 and later.

TaskStatus

Represents the status of a Task, such as Not Started, Completed, or Closed.

TaskTag

Associates a word or short phrase with a Task.

TaskWhoRelation

Represents the relationship between a task and a lead or contacts. This object is available in API version 29.0 and later.

TenantSecret

This object stores an encrypted organization-specific key fragment that is used with the master secret to produce organization-specific data encryption keys. This object is available in API version 34.0 and later.

Territory

Represents a flexible collection of accounts and users where the users have at least read access to the accounts, regardless of who owns the accounts. Only available if territory management has been enabled for your organization.

Territory2

Represents a sales territory. Available only if Enterprise Territory Management has been enabled for your organization.

Territory2Model

Represents a territory model. Available only if Enterprise Territory Management has been enabled for your organization.

Territory2ModelHistory

Represents the history of changes to the values in the fields on a territory model. Available only if Enterprise Territory Management has been enabled for your organization.

Territory2Type

Represents a category for territories (Territory2). Every Territory2 must have a Territory2Type. Available only if Enterprise Territory Management has been enabled for your organization.

TestSuiteMembership

Associates an Apex class with an ApexTestSuite. This object is available in API version 36.0 and later.

ThirdPartyAccountLink

Represents the list of external users who authenticated using an Auth. Provider. This object is available in API version 32.0 and later.

ThreatDetectionFeedback

Represents feedback provided by a user about a Threat Detection event that occurred in your org. The feedback specifies whether the event was malicious, suspicious, not a threat, or unknown. Each ThreatDetectionFeedback object is associated with one of these Threat Detection storage events: CredentialStuffingEventStore, ReportAnomalyEventStore, or SessionHijackingEventStore. This object is available in API version 49.0 and later.

TimeSheet

Represents a schedule of a service resource's time in field service. This object is available in API v47.0 and later.

TimeSheetEntry

Represents a span of time that a service resource spends on a field service task. This object is available in API version 47.0 and later.

TimeSlot

Represents a period of time on a specified day of the week during which field service work can be performed in Field Service and Lightning Scheduler. Operating hours consist of one or more time slots. This object is available in API version 38.0 and later.

TimeSlotHistory

Represents the history of changes made to tracked fields on a time slot. This object is available in API version 38.0 and later.

Topic

Represents a topic on a Chatter post or record. This object is available in API version 28.0 and later.

TopicAssignment

Represents the assignment of a topic to a specific feed item, record, or file. This object is available in API version 28.0 and later.

TopicLocalization

Represents the translated version of a topic name. Topic localization applies only to navigational and featured topics in Experience Cloud sites. This object is available in API version 33.0 and later.

TopicUserEvent

Represents an action (such as comment, post, like, or share) made by a user on a topic. This object is available in API version 42.0 and later.

TransactionSecurityPolicy

Represents a transaction security policy definition.

Translation

The Translation object represents the languages enabled for translation in your Salesforce org. This object is available in API version 47.0 and later.

TwoFactorInfo

Stores a user's secret for multi-factor operations. Use this object when customizing multi-factor authentication in your organization. (Note that multi-factor authentication was formerly called two-factor authentication.) This object is available in API version 32.0 and later.

TwoFactorMethodsInfo

Stores information about which identity verification methods a user has registered. This object is available in API version 37.0 and later.

TwoFactorTempCode

Stores information about a user's temporary verification code for confirming their identity when logging in. This object is available in API version 37.0 and later.

UiFormulaCriterion

Represents a filter that helps define component visibility on a Lightning page. This object is available in API version 47.0 and later.

UiFormulaRule

Represents a set of one or more filters that define the conditions under which a component displays on a Lightning page. This object is available in API version 47.0 and later.

UndecidedEventRelation

Represents event participants (invitees or attendees) with the status `Not Responded` for a given event. This object is available in API versions 29.0 and later.

User

Represents a user in your organization.

UserAccountTeamMember

Represents a User on the default account team of another User.

UserAppInfo

Stores the last Lightning app logged in to. This object is available in API version 38.0 and later.

UserAppMenuCustomization

Represents an individual user's settings for items in the app menu or App Launcher. This object is available in API version 35.0 and later.

UserAppMenuItem

Represents the organization-wide settings for items in the app menu or App Launcher that the requesting user has access to in Setup. This object is available in API version 35.0 and later.

UserAuthCertificate

Represents a user authentication certificate in your org. A user certificate is a unique PEM-encoded X.509 digital certificate to authenticate individual users to your org. This object is available in API version 45.0 and later.

UserConfigTransferButton

Represents the association between a Chat configuration and a live chat button. This association allows users associated with a specific configuration to transfer chats to a button queue.

UserConfigTransferSkill

Represents the association between a Chat configuration and a skill. This association allows users associated with a specific configuration to transfer chats to agents who have that skill.

UserCustomBadge

Represents a custom badge for a user. This object is available in API version 38.0 and later.

UserCustomBadgeLocalization

Represents the translated version of a custom badge for a user. This object is available in API version 38.0 and later.

UserDevice

Represents information unique to a device. Available in API version 43.0 and later.

UserDeviceApplication

Represents information on applications installed on a device that is accessing Salesforce. Available in API version 43.0 and later.

UserDeviceHistory

Represents tracking information on the UserDevice sObject. This object is available in API version 50.0 and later.

UserEmailCalendarSync

Represents the user assignments of an Einstein Activity Capture configuration. This object is available in API version 49.0 and later.

UserEmailPreferredPerson

Represents a mapping for a user's preferred record for an email address when multiple records match an email field.This object is available in API version 44.0 and later.

UserEmailPreferredPersonShare

Represents a sharing entry on a UserEmailPreferredPerson object. Sharing is not customizable for UserEmailPreferredPerson records.This object is available in API version 44.0 and later.

UserLicense

Represents a user license in your organization. A user license entitles a user to specific functionality and determines the profiles and permission sets available to the user.

UserListView

Represents the customizations a user made to a list view. This object is available in API version 32.0 and later.

UserListViewCriterion

Represents the criterion for a user's customized list view. The criterion consists of the filters or sort order a user added to a list view for the Salesforce Mobile app. This object is available in API version 32.0 and later.

UserLogin

Represents the settings that affect a user's ability to log into an organization. To access this object, you need the `UserPermissions.ManageUsers` permission. This object is available in API version 29.0 and later.

UserMembershipSharingRule

Represents the rules for sharing user records from a source group to a target group. A user record contains details about a user. Users who are members of the source group can be shared with members of the target group. The source and target groups can be based on roles, portal roles, public groups, or territories. This object is available in API version 26.0 and later.

UserPackageLicense

Represents a license for an installed managed package, assigned to a specific user. This object is available in API version 31.0 and later.

UserPermissionAccess

Represents the permissions accessibility for a current user. Available in API version 41.0 and later.

UserPreference

Represents a functional preference for a specific user in your organization.

UserProfile

Represents a Chatter user profile.

UserProvAccount

Represents information that links a Salesforce user account with an account in a third-party (target) system, such as Google, for users of connected apps with Salesforce user provisioning enabled. This object is available in API version 33.0 and later.

UserProvAccountStaging

Temporarily stores user account information while a user completes the User Provisioning Wizard. This information that is stored in the UserProvAccount object when you click the button to collect and analyze accounts on the target system.

UserProvMockTarget

Represents an entity for testing user data before committing the data to a third-party system for user provisioning.

UserProvisioningConfig

Represents information for a flow to use during a user provisioning request process, such as the attributes for an update. This object is available in API version 34.0 and later.

UserProvisioningLog

Represents messages generated during the process of provisioning users for third-party applications. This object is available in API version 33.0 and later.

UserProvisioningRequest

Represents an individual provisioning request to create, update, or delete a single user account in a third-party service system (or another Salesforce organization). This object is available in API version 33.0 and later.

UserRecordAccess

Represents a user's access to a set of records. This object is read only and is available in API version 24.0 and later.

UserRole

Represents a user role in your organization.

UserServicePresence

Represents a presence user's real-time presence status. This object is available in API version 32.0 and later.

UserShare

Represents a sharing entry on a user record. This object is available in API version 26.0 and later.

UserTeamMember

Represents a single User on the default opportunity team of another User.

UserTerritory

Represents a User who has been assigned to a Territory.

UserTerritory2Association

Represents an association (by assignment) between a territory and a user record. Available only if Enterprise Territory Management has been enabled for your organization.

UserWorkList

Represents a list of work items in the My Feed tab for High Velocity Sales users.

UserWorkListItem

Represents an individual work item in the My Feed tab for High Velocity Sales users.

VerificationHistory

Represents the past six months of your org users' attempts to verify their identity. This object is available in API version 36.0 and later.

VisualforceAccessMetrics

Represents summary statistics for Visualforce pages.

VideoCall

Represents a video call.

VideoCallParticipant

Represents a participant in a video call.

VideoCallRecording

Represents a recording from a video call, such as a video recording, a voice recording, or a transcript.

VoiceCall

Represents a call in Service Cloud Voice and Sales Dialer.

VoiceCallList

Represents a prioritized list of numbers to call.

VoiceCallListItem

Represents a single phone number in a prioritized call list.

VoiceCallQualityFeedback

Represents feedback given by a Sales Dialer user about the quality of a VoiceCall.

VoiceCallRecording

Represents a call recording in Service Cloud Voice and Sales Dialer. Call recordings are saved as files in Salesforce.

VoiceCoaching

Represents a call that is using call monitoring.

VoiceLocalPresenceNumber

Represents a phone number with the same area code as the person who's being called.

VoiceMailContent

Represents a voicemail message left by a caller to the context user.

VoiceMailGreeting

Represents a custom greeting message that plays upon reaching a user's voicemail. This object is available in API version 41.0 and later.

VoiceMailMessage

Represents a prerecorded voicemail message.

VoiceUserLine

Represents a user's forwarding phone number.

VoiceUserPreferences

Represents the number the user displays when making outbound calls. This object is available in API version 41.0 and later.

VoiceVendorInfo

Represents information about the Service Cloud Voice or Sales Dialer provider's vendor.

VoiceVendorLine

Represents a user's phone number reserved with the vendor.

Vote

Represents a vote that a user has made on an Idea or a Reply.

WarrantyTerm

Represents warranty terms defining the labor, parts, and expenses covered, along with any exchange options, provided to rectify issues with products. This object is available in API version 50.0 and later.

WaveAutoInstallRequest

Provides access the concrete object that represents an Analytics auto install request. The auto install request tracks the progress of Analytics applications created from Analytics templates by the automated process user. This object is available in API version 38.0 and later.

WebCart

Represents an online shopping cart in a store built with B2B Commerce on Lightning, with total amounts for products, shipping and handling, and taxes. This object is available in API version 49.0 and later.

WebCartHistory

WebCartHistory represents the history of changes to the values in the fields of the `WebCart` object.

WebLink

Represents a custom link to a URL or Scontrol.

WebLinkLocalization

Represents the translated value of the field label for a custom link to a URL or s-control when the Translation Workbench is enabled for your organization.

WebStore

Represents a B2B Commerce store.This object is available in API version 49.0 and later.

WebStoreCatalog

Represents the collection of products associated with a store.This object is available in API version 49.0 and later.

WebStorePricebook

Represents a store price book used in Lightning B2B Commerce. This object is available in API version 48.0 and later.

Wishlist

Represents a buyer-created list of `WishlistItem`s in a store that's built with B2B Commerce on Lightning. Available in API version 49.0 and later.

WishlistItem

Represents an item on a `Wishlist` in a store built with B2B Commerce for Lightning. Available in API version 49.0 and later.

WorkAccess

Used to grant or restrict user access to give badge definitions. Each badge definition record must have one WorkAccess record.

WorkAccessShare

Used to control Givers of WorkBadgeDefinition records.

WorkBadge

Represents information about who the badge was given to and which badge was given. A WorkBadge record is created for each recipient of a WorkBadgeDefinition.

WorkBadgeDefinition

Represents the attributes of a badge including the badge name, description, and image. Each WorkBadge record must have a lookup to a WorkBadgeDefinition since badge attributes (like badge name) are derived from the WorkBadgeDefinition object.

WorkCoaching

Represents a single coaching relationship between two users. One of the users is defined as the coach and the other is defined as a coachee. WorkCoaching is feed-enabled so there is a private feed available to the coach and coachee.

WorkFeedback

Represents the answer to a question that a person was asked via a feedback request. Also used to store offered feedback without linking it to a particular question.

WorkFeedbackQuestion

Represents a free-form text type or multiple choice question within a set of questions.

WorkFeedbackQuestionSet

Represents a set of questions being asked. The question set is used to link all the individual requests where different recipients were asked the same set of questions on the same subject.

WorkFeedbackRequest

Represents a single feedback request on a subject or topic (question) to a single recipient in the feedback application. In the case of offered feedback, WorkFeedbackRequest represents feedback that is offered about a subject. In the performance application, WorkFeedbackRequest represents a request for feedback on a set of questions from a question set, on a subject—for the recipient to complete and submit.

WorkGoal

Represents the components of a goal, such as its description and associated metrics. This object has been deprecated as of API version 35.0. Use the Goal object to query information about WDC goals.

WorkGoalCollaborator

Represents collaborators on a WorkGoal object. This doesn't include WorkGoal followers, which is handled by Chatter Feed Follow functionality. This object has been deprecated as of API version 35.0. Use the Goal object to query information about WDC goals.

WorkGoalCollaboratorHistory

Represents the history of changes to the values in the fields in a WorkGoalCollaborator object. Access is read-only.

WorkGoalHistory

Represents the history of changes to the values in the fields of a WorkGoal. Access is read-only. This object has been deprecated as of API version 35.0. Use the GoalHistory object to query historical information for WDC goals.

WorkGoalLink

Represents the relationship between two goals (many to many relationship). This object has been deprecated as of API version 35.0. Use the GoalLink object to query information about the relationship between two WDC goals.

WorkGoalShare

Represents a sharing entry on a WorkGoal object. This object has been deprecated as of API version 35.0. Use the GoalShare object to query information about sharing for WDC goals.

WorkOrder

Represents field service work to be performed for a customer. This object is available in API version 36.0 and later.

WorkOrderHistory

Represents the history of changes made to tracked fields on a work order. This object is available in API version 36.0 and later.

WorkOrderLineItem

Represents a subtask on a work order in field service. This object is available in API version 36.0 and later.

WorkOrderLineItemHistory

Represents the history of changes made to tracked fields on a work order line item. This object is available in API version 36.0 and later.

WorkOrderLineItemStatus

Represents a possible status of a work order line item in field service.

WorkOrderShare

Represents a sharing entry on a work order. This object is available in API version 36.0 and later.

WorkOrderStatus

Represents a possible status of a work order in field service.

WorkPerformanceCycle

Represents feedback that is gathered to assess the performance of a specific set of employees.

WorkReward

Used to store reward codes tied to a Reward Fund. Reward Funds must have at least one WorkReward record.

WorkRewardFund

Represents a Reward Fund and describes the Reward Fund attributes.

WorkRewardFundType

Represents the type of WorkRewardFund object.

WorkThanks

Represents the source and message of a thanks post.

WorkType

Represents a type of work to be performed in Field Service and Lightning Scheduler. Work types are templates that can be applied to work order or work order line items. This object is available in API version 38.0 and later.

WorkTypeGroup

Represents a grouping of work types used to categorize types of appointments available in Lightning Scheduler, or to define scheduling limits in Field Service. This object is available in API version 45.0 and later.

WorkTypeGroupMember

Represents the relationship between a work type and the work type group it belongs to. This object is available in API version 45.0 and later.

AcceptedEventRelation

Represents event participants (invitees or attendees) with the status `Accepted` for a given event.

This object is available in API versions 29.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`EventId`	**Type** reference

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** Indicates the ID of the event.
RelationId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the invitee.
RespondedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates the most recent date and time when the invitee accepted an invitation to the event.
Response	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Indicates the content of the response field. Label is `Comment`.
Type	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Indicates whether the invitee is a user, lead or contact, or resource.

Usage

Query invitees who have accepted an invitation to an event

```
SELECT eventId, type, response FROM AcceptedEventRelation WHERE eventid='00UTD000000ZH5LA'
```

SEE ALSO:

DeclinedEventRelation

UndecidedEventRelation

Account

Represents an individual account, which is an organization or person involved with your business (such as customers, competitors, and partners).

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `merge()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can access their own accounts and any account shared with them.

Fields

Field Name	Details
`AccountNumber`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Account number assigned to this account (not the unique, system-generated ID assigned during creation). Maximum size is 40 characters.
`AccountSource`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The source of the account record. For example, *`Advertisement`*, *`Data.com`*, or *`Trade Show`*. The source is selected from a picklist of available values, which are set by an administrator. Each picklist value can have up to 40 characters.

Field Name	Details
AnnualRevenue	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** Estimated annual revenue of the account.
BillingAddress	**Type** address **Properties** Filter, Nillable **Description** The compound form of the billing address. Read-only. See Address Compound Fields for details on compound address fields.
BillingCity	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Details for the billing address of this account. Maximum size is 40 characters.
BillingCountry	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Details for the billing address of this account. Maximum size is 80 characters.
BillingCountryCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO country code for the account’s billing address.
BillingGeocodeAccuracy	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update

Field Name	Details
	Description Accuracy level of the geocode for the billing address. See Compound Field Considerations and Limitations for details on geolocation compound fields.
BillingLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `BillingLongitude` to specify the precise geolocation of a billing address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields.
BillingLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `BillingLatitude` to specify the precise geolocation of a billing address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields.
BillingPostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Details for the billing address of this account. Maximum size is 20 characters.
BillingState	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Details for the billing address of this account. Maximum size is 80 characters.
BillingStateCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO state code for the account's billing address.

Field Name	Details
`BillingStreet`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Street address for the billing address of this account.
`ChannelProgramName`	**Type** string **Properties** Group, Nillable **Description** Read only. Name of the channel program the account has enrolled. Note: If this account has enrolled more than one channel program, the oldest channel program name will be displayed. .
`ChannelProgramLevelName`	**Type** string **Properties** Group, Nillable **Description** Read only. Name of the channel program level the account has enrolled. Note: If this account has enrolled more than one channel program level, the oldest channel program name will be displayed.
`CleanStatus`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates the record's clean status as compared with Data.com. Values are: `Matched`, `Different`, `Acknowledged`, `NotFound`, `Inactive`, `Pending`, `SelectMatch`, or `Skipped`. Several values for `CleanStatus` display with different labels on the account record detail page. • `Matched` displays as `In Sync` • `Acknowledged` displays as `Reviewed` • `Pending` displays as `Not Compared`

Field Name	Details
`ConnectionReceivedId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the PartnerNetworkConnection that shared this record with your organization. This field is available if you enabled Salesforce to Salesforce.
`ConnectionSentId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the PartnerNetworkConnection that you shared this record with. This field is available if you enabled Salesforce to Salesforce. This field is supported using API versions earlier than 15.0. In all other API versions, this field's value is null. You can use the new PartnerNetworkRecordConnection object to forward records to connections.
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** Text description of the account. Limited to 32,000 KB.
`DunsNumber`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The Data Universal Numbering System (D-U-N-S) number is a unique, nine-digit number assigned to every business location in the Dun & Bradstreet database that has a unique, separate, and distinct operation. D-U-N-S numbers are used by industries and organizations around the world as a global standard for business identification and tracking. Maximum size is 9 characters. This field is available on business accounts, not person accounts. Note: This field is only available to organizations that use Data.com Prospector or Data.com Clean.
`Fax`	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description Fax number for the account.
HasOptedOutOfEmail	**Type** boolean **Properties** Create, Defaulted on create, Filter, Update **Description** Indicates whether the contact doesn’t want to receive email from Salesforce (`true`) or does (`false`). Label is **Email Opt Out**.
Industry	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An industry associated with this account. Maximum size is 40 characters.
IsCustomerPortal	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the account has at least one contact enabled to use the org's Customer Portal (`true`) or not (`false`). This field is available if Customer Portal is enabled OR digital experiences is enabled and you have Customer Portal licenses. If you change this field's value from `true` to `false`, you can disable up to 100 Customer Portal users associated with the account and permanently delete all of the account's Customer Portal roles and groups. You can't restore deleted Customer Portal roles and groups. This field can be updated in API version 16.0 and later. Tip: We recommend that you update up to 50 contacts simultaneously when changing the accounts on contacts enabled for a Customer Portal or partner portal. We also recommend that you make this update after business hours.
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.

Field Name	Details
`IsPartner`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the account has at least one contact enabled to use the org's partner portal (`true`) or not (`false`). This field is available if partner relationship management (partner portal) is enabled ORdigitial experiences is enabled and you have partner portal licenses. If you change this field's value from `true` to `false`, you can disable up to 15 partner portal users associated with the account and permanently delete all of the account's partner portal roles and groups. You can't restore deleted partner portal roles and groups. Disabling a partner portal user in the Salesforce user interface or the API does not change this field's value from `true` to `false`. Even if this field's value is `false`, you can enable a contact on an account as a partner portal user via the API. This field can be updated in API version 16.0 and later. Tip: We recommend that you update up to 50 contacts simultaneously when changing the accounts on contacts enabled for a Customer Portal or partner portal. We also recommend that you make this update after business hours.
`IsPersonAccount`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Read only. Label is **Is Person Account**. Indicates whether this account has a record type of Person Account (`true`) or not (`false`).
`Jigsaw`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** References the ID of a company in Data.com. If an account has a value in this field, it means that the account was imported from Data.com. If the field value is `null`, the account was not imported from Data.com. Maximum size is 20 characters. Available in API version 22.0 and later. Label is **Data.com Key**. This field is available on business accounts, not person accounts. Important: The `Jigsaw` field is exposed in the API to support troubleshooting for import errors and reimporting of corrected data. Do not modify the value in the `Jigsaw` field.

Field Name	Details
LastActivityDate	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Value is one of the following, whichever is the most recent: • Due date of the most recent event logged against the record. • Due date of the most recently closed task associated with the record.
LastReferencedDate	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
LastViewedDate	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (LastReferencedDate) but not viewed it.
MasterRecordId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** If this object was deleted as the result of a merge, this field contains the ID of the record that was kept. If this object was deleted for any other reason, or has not been deleted, the value is null.
NaicsCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The six-digit North American Industry Classification System (NAICS) code is the standard used by business and government to classify business establishments into industries,

Field Name	Details
	according to their economic activity for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy. Maximum size is 8 characters. This field is available on business accounts, not person accounts. Note: This field is only available to organizations that use Data.com Prospector or Data.com Clean.
`NaicsDesc`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an org's line of business, based on its NAICS code. Maximum size is 120 characters. This field is available on business accounts, not person accounts. Note: This field is only available to organizations that use Data.com Prospector or Data.com Clean.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. Label is **Account Name**. Name of the account. Maximum size is 255 characters. If the account has a record type of Person Account: • This value is the concatenation of the `FirstName`, `MiddleName`, `LastName`, and `Suffix` of the associated person contact. • You can't modify this value.
`NumberOfEmployees`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Label is **Employees**. Number of employees working at the company represented by this account. Maximum size is eight digits.
`OperatingHoursId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The operating hours associated with the account. Available only if Field Service is enabled.

Field Name	Details
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the user who currently owns this account. Default value is the user logged in to the API to perform the create. If you have set up account teams in your org, updating this field has different consequences depending on your version of the API: • For API version 12.0 and later, sharing records are kept, as they are for all objects. • For API version before 12.0, sharing records are deleted. • For API version 16.0 and later, users must have the "Transfer Record" permission in order to update (transfer) account ownership using this field.
Ownership	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Ownership type for the account, for example Private, Public, or Subsidiary.
ParentId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the parent object, if any.
PersonIndividualId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the data privacy record associated with this person's account. This field is available if you enabled Data Protection and Privacy in Setup. Available in API version 42.0 and later.
Phone	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description Phone number for this account. Maximum size is 40 characters.
`PhotoUrl`	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** Path to be combined with the URL of a Salesforce instance (for example, https://*yourInstance*.salesforce.com/) to generate a URL to request the social network profile image associated with the account. Generated URL returns an HTTP redirect (code 302) to the social network profile image for the account. Blank if Social Accounts and Contacts isn't enabled for the org or if Social Accounts and Contacts is disabled for the requesting user.
`Rating`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The account's prospect rating, for example Hot, Warm, or Cold.
`RecordTypeId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the record type assigned to this object.
`Salutation`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Honorific added to the name for use in letters, etc.
`ShippingAddress`	**Type** address **Properties** Filter, Nillable

Field Name	Details
	Description The compound form of the shipping address. Read-only. See Address Compound Fields for details on compound address fields.
ShippingCity	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Details of the shipping address for this account. City maximum size is 40 characters
ShippingCountry	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Details of the shipping address for this account. Country maximum size is 80 characters.
ShippingCountryCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO country code for the account's shipping address.
ShippingGeocodeAccuracy	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Accuracy level of the geocode for the shipping address. See Compound Field Considerations and Limitations for details on geolocation compound fields.
ShippingLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `ShippingLongitude` to specify the precise geolocation of a shipping address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields.

Field Name	Details
ShippingLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with ShippingLatitude to specify the precise geolocation of an address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields.
ShippingPostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Details of the shipping address for this account. Postal code maximum size is 20 characters.
ShippingState	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Details of the shipping address for this account. State maximum size is 80 characters.
ShippingStateCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO state code for the account's shipping address.
ShippingStreet	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street address of the shipping address for this account. Maximum of 255 characters.
Sic	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description Standard Industrial Classification code of the company's main business categorization, for example, 57340 for Electronics. Maximum of 20 characters. This field is available on business accounts, not person accounts.
`SicDesc`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an org's line of business, based on its SIC code. Maximum length is 80 characters. This field is available on business accounts, not person accounts.
`Site`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Name of the account's location, for example `Headquarters` or `London`. Label is **Account Site**. Maximum of 80 characters.
`TickerSymbol`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The stock market symbol for this account. Maximum of 20 characters. This field is available on business accounts, not person accounts.
`Tradestyle`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A name, different from its legal name, that an org may use for conducting business. Similar to "Doing business as" or "DBA". Maximum length is 255 characters. This field is available on business accounts, not person accounts. Note: This field is only available to organizations that use Data.com Prospector or Data.com Clean.
`Type`	**Type** picklist

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** Type of account, for example, Customer, Competitor, or Partner.
`Website`	**Type** url **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The website of this account. Maximum of 255 characters.
`YearStarted`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date when an org was legally established. Maximum length is 4 characters. This field is available on business accounts, not person accounts. Note: This field is only available to organizations that use Data.com Prospector or Data.com Clean.

IsPersonAccount Fields

These fields are the subset of person account fields that are contained in the child person contact record of each person account. If the `IsPersonAccount` field has the value `false`, the following fields have a null value and can't be modified. If `true`, the fields can be modified.

Person accounts are not enabled by default.

Field Name	Details
`FirstName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** First name of the person for a person account. Maximum size is 40 characters.
`LastName`	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** Last name of the person for a person account. Required if the record type is a person account record type. Maximum size is 80 characters.
`MiddleName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Middle name of the person for a person account. Maximum size is 40 characters. Contact Salesforce Customer Support to enable this field.
`PersonAssistantName`	**Type** string **Properties** Create, Filter, Nillable, Update **Description** The person account's assistant name. Label is **Assistant**. Maximum size is 40 characters.
`PersonAssistantPhone`	**Type** phone **Properties** Create, Filter, Nillable, Update **Description** The person account's assistant phone. Label is **Asst. Phone**. Maximum size is 40 characters.

`PersonBirthDate`	**Type**
	date
	Properties
	Create, Filter, Nillable, Update
	Description
	The assistant name. Label is **Birthdate**.
	Note: The year portion of the `PersonBirthDate` field is ignored in filter criteria, including report filters, list view filters, and SOQL queries. For example, the following SOQL query returns person accounts with birthdays later in the year than today:
	`SELECT FirstName, LastName, PersonBirthDate`
	`FROM Account`
	`WHERE Birthdate > TODAY`

Field Name	Details
PersonContactId	**Type** reference **Properties** Filter, Nillable, Update **Description** The ID for the contact associated with this person account. Label is **Contact ID**.
PersonDepartment	**Type** string **Properties** Create, Filter, Nillable, Update **Description** The department. Label is **Department**. Maximum size is 80 characters.
PersonEmail	**Type** email **Properties** Create, Filter, Nillable, Update **Description** Email address for this person account. Label is **Email**.
PersonEmailBouncedDate	**Type** dateTime **Properties** Create, Filter, Nillable, Update **Description** If bounce management is activated and an email sent to the person account bounces, the date and time the bounce occurred.
PersonEmailBouncedReason	**Type** string **Properties** Create, Filter, Nillable, Update **Description** If bounce management is activated and an email sent to the person account bounces, the reason the bounce occurred
PersonHasOptedOutOfEmail	**Type** boolean **Properties** Create, Filter, Nillable, Update

Field Name	Details
	Description Indicates whether the person account has opted out of email (`true`) or not (`false`). Label is **Email Opt Out**.
`PersonHomePhone`	**Type** phone **Properties** Create, Filter, Nillable, Update **Description** The home phone number for this person account. Label is **Home Phone**.
`PersonLeadSource`	**Type** picklist **Properties** Create, Filter, Nillable, Update **Description** The person account's lead source. Label is **Lead Source**.
`PersonMailingAddress`	**Type** address **Properties** Filter, Nillable **Description** The compound form of the person account mailing address. Read-only. See Address Compound Fields for details on compound address fields.
`PersonMailingCity`	**Type** string **Properties** Create, Filter, Nillable, Update **Description** Details about the person account's mailing city. Labels are **Mailing City**, **Mailing Country**, **Postal Code**, and **State**. Maximum size for city and country is 40 characters. Maximum size for postal code and state is 20 characters.
`PersonMailingGeocodeAccuracy`	**Type** picklist **Properties** Retrieve, Query, Restricted picklist, Nillable **Description** Accuracy level of the geocode for the person's mailing address. See Compound Field Considerations and Limitations for details on geolocation compound fields.

Field Name	Details
`PersonMailingLatitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `PersonMailingLongitude` to specify the precise geolocation of a person account's mailing address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields.
`PersonMailingLongitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `PersonMailingLatitude` to specify the precise geolocation of a person account's mailing address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places. See Compound Field Considerations and Limitations on page 43 for details on geolocation compound fields.
`PersonMailingStreet`	**Type** textarea **Properties** Create, Filter, Nillable, Update **Description** The mailing street address for this person account. Label is **Mailing Street**. Maximum size is 255 characters.
`PersonMobilePhone`	**Type** phone **Properties** Create, Filter, Nillable, Update **Description** The mobile phone number for this person account. Label is **Mobile**.
• `PersonOtherCity` • `PersonOtherCountry` • `PersonOtherPostalCode` • `PersonOtherState`	**Type** string **Properties** Create, Filter, Nillable, Update **Description** Details about the alternate address for this person account. Labels are **Other City**, **Other Country**, **Other Zip/Postal Code**, and **Other State**.

Field Name	Details
• PersonOtherCountryCode • PersonOtherStateCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO country or state code for the alternate address of the person account.
PersonOtherLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with PersonOtherLongitude to specify the precise geolocation of a person account's alternate address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields.
PersonOtherLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with PersonOtherLatitude to specify the precise geolocation of a person account's alternate address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields.
PersonOtherPhone	**Type** phone **Properties** Create, Filter, Nillable, Update **Description** The alternate phone number for this person account. Label is **Other Phone**.
PersonOtherStreet	**Type** textarea **Properties** Create, Filter, Nillable, Update **Description** The person account's alternate street address. Label is **Other Street**.

Field Name	Details
`PersonTitle`	**Type** string **Properties** Create, Filter, Nillable, Update **Description** The person account's title. Label is **Title**. Maximum size is 80 characters.
`Suffix`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Name suffix of the person for a person account. Maximum size is 40 characters. Contact Salesforce Customer Support to enable this field.

Note: If you are importing Account data into Salesforce and need to set the value for an audit field, such as `CreatedDate`, contact Salesforce. Audit fields are automatically updated during API operations unless you request to set these fields yourself.

Usage

Use this object to query and manage accounts in your org. Client applications can create, update, delete, or query Attachment records associated with an account via the API.

Client applications can also create or update account objects by converting a Lead via the `convertLead()` call.

If the values in the IsPersonAccount Fields are not null, you can't change `IsPersonAccount` to `false`, or an error occurs.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

AccountFeed (API version 18.0)
Feed tracking is available for the object.

AccountHistory (API version 11.0)
History is available for tracked fields of the object.

AccountOwnerSharingRule
Sharing rules are available for the object.

AccountShare

Sharing is available for the object.

SEE ALSO:

AccountShare

AccountTeamMember

Person Account Record Types

AccountBrand

Represents the brand details of a Partner Account. This object is available in API version 43.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()` `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is available only if digital experiences is enabled in your org and it has a Partner Community or Customer Community Plus license.

Fields

Field	Details
`AccountId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the Account. This number is unique within your organization.
`Address`	**Type** address **Properties** Filter, Nillable **Description** The street address.
`City`	**Type** string

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The city.
CompanyName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The name of the company associated with the account brand.
Country	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The country where the account is physically located.
Email	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Email address associated with the account.
GeocodeAccuracy	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist Sort, Update **Description** Stores data for accurate geocoded location.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Most recent date referenced.
LastViewedDate	**Type** dateTime

Field	Details
	Properties Filter, Nillable, Sort **Description** Most recent date viewed.
`Latitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used along with `Longitude` to specify the precise geolocation of an address.
`LogoId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the logo.
`LogoUrl`	**Type** url **Properties** Nillable, **Description** URL of the logo. This field is available in API version 44.0 and later.
`Longitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `Latitude` to specify the precise geolocation of an address.
`Name`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Required. Name of the account.
`OwnerId`	**Type** reference

Field	Details
	Properties Create, Defaulted on create Filter, Group, Sort, Update **Description** Required. ID of the Owner.
Phone	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Phone number.
PostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The postal code where the user's IP address is physically located.
State	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The address state.
Street	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The address street.
Website	**Type** url **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Website for the Account Brand.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

AccountBrandOwnerSharingRule
Sharing rules are available for the object.

AccountBrandShare
Sharing is available for the object.

AccountContactRelation

Represents a relationship between a contact and one or more accounts.

This object is available in API version 37.0. The AccountContactRelation object supports person accounts. That means that a person account can be either a related contact on a business account or a related account on a contact. A person account can also be related to another person account as either a related contact or related account.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AccountContactRelationshipCurrency`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization.
`AccountId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the account that is related to the contact. Field can't be modified when updating existing account-contact relationship records.
`ContactId`	**Type** reference **Properties** Create, Filter, Group, Sort

Field Name	Details
	Description ID of the contact that is related to the account. Field can't be modified when updating existing account-contact relationship records.
`EndDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date a relationship between a contact and account ended. Use with the `Start Date` to keep a history of the relationship.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether relationship is active (`true`) or not (`false`).
`IsDirect`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the account associated with the contact is the contact's primary account (`true`) or not (`false`).
`Roles`	**Type** multipicklist **Properties** Create, Filter, Nillable, Update **Description** The contact's participating role in the account. Values are `Business User`, `Decision Maker`, `Economic Buyer`, `Economic Decision Maker`, `Evaluator`, `Executive Sponsor`, `Influencer`, `Technical Buyer`, and `Other`.
`StartDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description The date a relationship between a contact and account began. Use with the `End Date` to keep a history of the relationship.

Usage

Use this object to associate a single contact record to multiple account records so you can easily track the relationships between the people and businesses they work with.

When you insert a non-private contact in your org that associates a contact to multiple accounts, an AccountContactRelation is created and its validation rules, database insertion, and triggers are executed immediately after the contact is saved to the database. When you change a contact's primary account, an AccountContactRelation may be created or edited, and the AccountContactRelation validation rules, database changes, and triggers are executed immediately after the contact is saved to the database. See Order of Execution.

AccountCleanInfo

Stores the metadata Data.com Clean uses to determine an account record's clean status. AccountCleanInfo helps you automate the cleaning or related processing of account records.

Note: When your Data.com Prospector or Data.com Clean contract expires, Data.com features, objects, and fields will be removed from your org.

To support customers' needs around compliance and to remain a leader in trust and privacy, Salesforce removed all contact data from the Data.com service on February 1, 2021.

For more information, see Data.com Prospector and Clean Retirement.

Account Clean Info provides a snapshot of the data in your Salesforce account record and its matched Data.com record at the time the Salesforce record was cleaned.

Account Clean Info includes a number of bit vector fields, whose component fields each correspond to individual object fields and provide related data or status information about those fields. For example, the bit vector field `IsDifferent` has an `IsDifferentState` field. If the `IsDifferentState` field's value is `False`, that means the `State` field value is *the same* on the Salesforce account record and its matched Data.com record.

AccountCleanInfo bit vector fields include:

- `CleanedBy` indicates who (a user) or what (a Clean job) cleaned the account record.
- `IsDifferent` indicates whether or not a field on the account record has a value that differs from the corresponding field on the matched Data.com record.
- `IsFlaggedWrong` indicates whether or not a field on the account record has a value that is flagged as wrong to Data.com.
- `IsReviewed` indicates whether or not a field on the account record is in a `Reviewed` state, which means that the value was reviewed but not accepted.

Their individual bits are defined here.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`

Fields

Field Name	Details
AccountId	**Type** reference **Properties** Filter, Group, Sort **Description** The unique, system-generated ID assigned when the account record was created.
AccountSite	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Information about the account's location, such as single location, headquarters, or branch.
Address	**Type** address **Properties** Filter, Nillable **Description** The compound form of the address. Read-only. See Address Compound Fields for details on compound address fields.
AnnualRevenue	**Type** currency **Properties** Filter, Nillable, Sort **Description** Estimated annual revenue of the account.
City	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address of the account.
CleanedByJob	**Type** boolean

Field Name	Details
	Properties Filter **Description** Indicates whether the account record was cleaned by a Data.com Clean job (`true`) or not (`false`).
`CleanedByUser`	**Type** boolean **Properties** Filter **Description** Indicates whether the account record was cleaned by a Salesforce user (`true`) or not (`false`).
`CompanyName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the company.
`CompanyStatusDataDotCom`	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** The status of the company per Data.com. Values are: `Company is In Business per Data.com` or `Company is Out of Business per Data.com.`
`Country`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address of the account.
`DandBCompanyDunsNumber`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The D-U-N-S Number on the D&B Company record (if any) that is linked to the account.
`DataDotComId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ID Data.com maintains for the company.
`Description`	**Type** textarea **Properties** Nillable **Description** A description of the account.
`DunsNumber`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The Data Universal Numbering System (D-U-N-S) number is a unique, nine-digit number assigned to every business location in the Dun & Bradstreet database that has a unique, separate, and distinct operation. D-U-N-S numbers are used by industries and organizations around the world as a global standard for business identification and tracking.
`DunsRightMatchConfidence`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The account's DUNSRight confidence code.
`DunsRightMatchGrade`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The account's DUNSRight match grade.

Field Name	Details
`Fax`	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** The account's fax number.
`Industry`	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** The industry the account belongs to.
`IsDifferentAccountSite`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `AccountSite` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentAnnualRevenue`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `AnnualRevenue` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentCity`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `City` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentCompanyName`	**Type** boolean **Properties** Filter

Field Name	Details
	Description Indicates whether the account's `AccountName` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentCountry`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `Country` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentCountryCode`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `Country Code` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentDandBCompanyDunsNumber`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `DandBCompanyID` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentDescription`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `Description` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentDunsNumber`	**Type** boolean **Properties** Filter

Field Name	Details
	Description Indicates whether the account's `DunsNumber` field value is different from the D-U-N-S Number on its matched Data.com record (`true`) or not (`false`).
`IsDifferentFax`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `Fax` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentIndustry`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `Industry` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentNaicsCode`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `NaicsCode` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentNaicsDescription`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `NaicsDescription` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentNumberOfEmployees`	**Type** boolean **Properties** Filter

Field Name	Details
	Description Indicates whether the account's `NumberOf Employees` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentOwnership`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `Ownership` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentPhone`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `Phone` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentPostalCode`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `PostalCode` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentSic`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `Sic` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentSicDescription`	**Type** boolean **Properties** Filter

Field Name	Details
	Description Indicates whether the account's `SicDescription` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentState`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `State` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentStateCode`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `State Code` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentStreet`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `State` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentTickerSymbol`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `TickerSymbol` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentTradestyle`	**Type** boolean **Properties** Filter

Field Name	Details
	Description Indicates whether the account's `Tradestyle` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentWebsite`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `Website` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentYearStarted`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `YearStarted` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsFlaggedWrongAccountSite`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `AccountSite` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongAddress`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `Address` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongAnnualRevenue`	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description Indicates whether the account's `AnnualRevenue` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongCompanyName`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `CompanyName` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongDescription`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `Description` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongDunsNumber`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `DunsNumber` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongFax`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `Fax` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongIndustry`	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description Indicates whether the account's `Industry` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongNaicsCode`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `NaicsCode` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongNaicsDescription`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `NaicsDescription` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongNumberOfEmployees`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `NumberOfEmployees` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongOwnership`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `Ownership` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongPhone`	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description Indicates whether the account's `Phone` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongSic`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `Sic` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongSicDescription`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `SicDescription` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongTickerSymbol`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `TickerSymbol` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongTradestyle`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `Tradestyle` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongWebsite`	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description Indicates whether the account's `Website` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongYearStarted`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `YearStarted` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsInactive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the account has been reported to Data.com as *`Inactive`* (`true`) or not (`false`).
`IsReviewedAccountSite`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `AccountSite` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedAddress`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `Address` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedAnnualRevenue`	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description Indicates whether the account's `AnnualRevenue` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedCompanyName`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `CompanyName` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedDandBCompanyDunsNumber`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `DandBCompanyID` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedDescription`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `Description` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedDunsNumber`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `DunsNumber` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedFax`	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description Indicates whether the account's `Fax` field value is in a `Reviewed` state (`true`) or not (`false`).
IsReviewedIndustry	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `Industry` field value is in a `Reviewed` state (`true`) or not (`false`).
IsReviewedNaicsCode	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `NaicsCode` field value is in a `Reviewed` state (`true`) or not (`false`).
IsReviewedNaicsDescription	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `NaicsDescription` field value is in a `Reviewed` state (`true`) or not (`false`).
IsReviewedNumberOfEmployees	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `NumberOfEmployees` field value is in a `Reviewed` state (`true`) or not (`false`).
IsReviewedOwnership	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description Indicates whether the account's `Ownership` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedPhone`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `Phone` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedSic`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `Sic` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedSicDescription`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `SicDescription` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedTickerSymbol`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `TickerSymbol` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedTradestyle`	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description Indicates whether the account's `Tradestyle` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedWebsite`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `Website` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedYearStarted`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `YearStarted` field value is in a `Reviewed` state (`true`) or not (`false`).
`LastMatchedDate`	**Type** dateTime **Properties** Filter, Sort **Description** The date the account record was last matched and linked to a Data.com record.
`LastStatusChangedById`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of who or what last changed the record's `Clean Status` field value: a Salesforce user or a Clean job.
`LastStatusChangedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date on which the record's `Clean Status` field value was last changed.

Field Name	Details
`Latitude`	**Type** double **Properties** Filter, Nillable, Sort **Description** Used with `Longitude` to specify the precise geolocation of a billing address. Data not currently provided.
`Longitude`	**Type** double **Properties** Filter, Nillable, Sort **Description** Used with `Latitude` to specify the precise geolocation of a billing address. Data not currently provided.
`NaicsCode`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The six-digit North American Industry Classification System (NAICS) code is the standard used by business and government to classify business establishments into industries, according to their economic activity for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy.
`NaicsDescription`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A brief description of an organization’s line of business, based on its NAICS code.
`Name`	**Type** string **Properties** Filter, Group, Sort, Update **Description** Field label is **Account Clean Info Name**. The name of the account. Maximum size is 255 characters.

Field Name	Details
NumberOfEmployees	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of employees working at the account.
Ownership	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** Ownership type for the account, for example Private, Public, or Subsidiary.
Phone	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** The phone number for the account.
PostalCode	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address of the account.
Sic	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Standard Industrial Classification code of the company’s main business categorization, for example, 57340 for Electronics.
SicDescription	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description A brief description of an organization's line of business, based on its SIC code.
`State`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address of the account.
`Street`	**Type** textarea **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address of the account.
`TickerSymbol`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The stock market symbol for the account.
`Tradestyle`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A name, different from its legal name, that an organization can use for conducting business. Similar to "Doing business as" (DBA).
`Website`	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** The website of the account.
`YearStarted`	**Type** string

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The year the company was established or the year when current ownership or management assumed control of the company.

Usage

Administrators can modify a limited set of AccountCleanInfo fields from the Account Clean Info page.

Developers can create triggers that read the Account Clean Info fields to help automate the cleaning or related processing of account records. For example, you might create a trigger that reads the `Clean Status` field on the Account object. If an account record's `Clean Status` field value is `Different` but the record has no `Billing Street` value, the trigger could update the record's status to `Not Compared`.

Create triggers that read AccountCleanInfo fields to help automate the cleaning or related processing of account records. For example:

- Keep account records' status `InSync` if the only difference from matched records is the `Phone` format (for example, *`(415) 353-8000`* on the account record versus *`415 353 8000`* on the matched Data.com record).

```
trigger AccountPhoneTrigger on Account (before update) {

   for (Account account: Trigger.new) {
       Account oldAccount = Trigger.oldMap.get(account.ID);
       if (account.CleanStatus == 'Different') {
           List <AccountCleanInfo> cleanInfo = [Select Id, IsDifferentPhone,
IsReviewedPhone, Phone from AccountCleanInfo where AccountId = :account.Id];
           if (cleanInfo.size() > 0 && cleanInfo[0].IsDifferentPhone &&
cleanInfo[0].Phone.StartsWith('+')) {
               // if Data.com phone number is marked Different but starts with '+',
ignore this
               // and set the status to "Reviewed"
               AccountCleanInfo cleanInfoToUpdate = new AccountCleanInfo();
               cleanInfoToUpdate.Id = cleanInfo[0].Id;
               cleanInfoToUpdate.IsReviewedPhone = true;
               update cleanInfoToUpdate;
               account.CleanStatus = 'Reviewed';
           }
       }
   }
}
```

- Create a customized set of `Industry` field values for accounts. Use triggers to map values from fields on imported or cleaned records onto a standard set of values.
- Read the `CleanStatus` field value on the Account object. If that value is `Different`, but a Salesforce record has no street address value, update the record's status to `Not Compared`.

AccountContactRole

Represents the role that a Contact plays on an Account.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`AccountId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the Account.
`ContactId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Required. ID of the Contact associated with this account.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`IsPrimary`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description Specifies whether the Contact plays the primary role on the Account (`true`) or not (`false`). Note that each account has only one primary contact role. Label is **Primary**. Default value is `false`.
`Role`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Name of the role played by the Contact on this Account, such as Decision Maker, Approver, Buyer, and so on. Must be unique—there can't be multiple records in which the `AccountId`, `ContactId`, and `Role` values are identical. Different contacts can play the same role on the same account. A contact can play different roles on the same account.

Usage

Use this object to define the role that a Contact plays on a given Account within the context of a specific Opportunity.

SEE ALSO:

Account

Contact

AccountInsight

Represents an individual insight (a key business development) related to an account record.

Supported Calls

`describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

To see an insight related to a specific account, users need a Sales Cloud Einstein license and access to the account record. As of the Spring '20 release, Pardot and High Velocity Sales users no longer have access to this object.

Fields

Field Name	Details
AccountId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the related account record.
ActualHeardWithinDays	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Reserved for future use.
CompetitorName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** This field has been deprecated as of API version 45.0.
ContactName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** This field is not in use as of API version 46.0.
ContactTitle	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** This field is not in use as of API version 46.0.
CurrencyIsoCode	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort

Field Name	Details
	Description Available only for orgs with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization.
`Division`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The division of the related record.
`ExpectedHeardWithinDays`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Reserved for future use.
`LastHeard`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Reserved for future use.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (`LastReferencedDate`) but not viewed it.

Field Name	Details
NumberOfNewsArticles	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of news articles related to insights of type `M&A activity detected`, `Company is expanding`, and `Leadership changes`.
Rationale	**Type** string **Properties** Filter, Group, Nillable **Description** The explanation for an insight, providing more background information and details that are specific to the org.
Title	**Type** string **Properties** Filter, Group, Nillable **Description** The title of the insight.
TrendType	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The trend type of the insight. Possible values include: • Negative • Positive • Informational
Type	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of insight. Possible values include: • M&A activity detected • Company is expanding

Field Name	Details
	• Leadership changes

Usage

This object is read-only and isn't supported with workflows, triggers, or process builder.

AccountOwnerSharingRule

Represents the rules for sharing an account with a User other than the owner.

Note: To programmatically update owner sharing rules, we recommend that you use Metadata API. Contact Salesforce customer support to enable access to this object for your org.

Supported Calls

create(), delete(), describeSObjects(), getDeleted(), getUpdated(), query(), retrieve(), update(), upsert()

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
AccountAccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Update **Description** A value that represents the type of sharing being allowed. The possible values are: • Read • Edit • All (This value isn't valid for creating or updating.)
CaseAccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update

Field	Details
	Description A value that represents the type of access granted to the target Group for all child cases. The possible values are: • `None` • `Read` • `Edit`
`ContactAccessLevel`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** A value that represents the type of access granted to the target Group, UserRole, or User for any associated contacts. The possible values are: • `None` • `Read` • `Edit` Note: When `DefaultContactAccess` is set to `Controlled by Parent`, you can't create or update this field.
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters. This field is available in API version 29.0 and later.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. This field is available in API version 24.0 and later.

Field	Details
	Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group. An Account owned by a User in the source Group triggers the rule to give access.
`OpportunityAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of access granted to the target Group for any associated Opportunity. The possible values are: • `None` • `Read` • `Edit`
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the User or Group being granted access.

Usage

Use this object to manage the sharing rules for accounts. General sharing and territory management-related sharing use this object. For example, the following code creates an account owner sharing rule between two public groups, which can also contain portal users.

```
AccountOwnerSharingRule rule = new AccountOwnerSharingRule();
rule.setName("RuleName"); // Set the sharing rule name
rule.setDeveloperName("RuleDeveloperName"); // Set the sharing rule developer name
rule.setGroupId("00Gx00000000000"); // Set the group of users to share records from
rule.setUserOrGroupId("00Gx00000000001"); // Set the group of users to share records to
rule.setAccountAccessLevel("Edit");
rule.setOpportunityAccessLevel("Read");
rule.setCaseAccessLevel("None");
connection.create(rule);
```

Note: The original territory management feature is scheduled for retirement for all customers as of Summer '21. After the feature is retired, users can't access the original territory management feature and its underlying data. We encourage you to migrate to Enterprise Territory Management. We also strongly recommend that you keep a comprehensive backup of your territory data while you're still using the original territory management feature. For more information, see The Original Territory Management Module Will Be Retired in the Summer '21 Release. The information in this topic applies to the original territory management feature only, and not to Enterprise Territory Management.

SEE ALSO:

Account

AccountShare

Metadata API Developer Guide: SharingRules

AccountPartner

This object represents a partner relationship between two Account records. An AccountPartner record is created automatically when a Partner record is created for a partner relationship between two accounts.

Note: This object is completely distinct from and independent of Account records that have been enabled for the partner portal.

Supported Calls

`create()`, `delete()`, `describeLayout()` `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`AccountFromId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the main Account in the partner relationship.
`AccountToId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the partner Account in the partner relationship.
`IsPrimary`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Indicates whether the AccountPartner is the main account's primary partner (`true`) or not (`false`).
`OpportunityId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the opportunity in a partner relationship.
`ReversePartnerId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the account in a partner relationship.
`Role`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort

Field	Details
	Description The UserRole that the partner Account has on the main Account. For example, `Consultant` or `Distributor`.

Creating an Account-Account Partner Relationship

When you create a partner relationship between two accounts (when you create a Partner record and specify the `AccountFromId`), the API automatically creates two AccountPartner records, one for the forward relationship and one for the reverse. For example, if you create a Partner relationship with “Acme, Inc.” as the `AccountFromId` and “Acme Consulting” as the `AccountToId`, the API automatically creates two AccountPartner records:

- The forward relationship AccountPartner with “Acme, Inc.” as the `AccountFromId` and “Acme Consulting” as the `AccountToId`.
- The reverse relationship AccountPartner with “Acme Consulting” as the `AccountFromId` and “Acme, Inc.” as the `AccountToId`.
- The value of the `Role` field in the reverse relationship AccountPartner is set to the PartnerRole record `ReverseRole` value associated with the value of the `Role` field in the forward relationship AccountPartner.

This mapping allows the API to manage the records and their relationships efficiently.

SEE ALSO:

Partner

OpportunityPartner

AccountRelationship

Represents a relationship of a given type between two accounts. This object is available in API version 45.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

In Digital Experience Settings, turn on the Enable Account Relationships org preference, which is off by default.

Fields

Field	Details
`AccountFromID`	**Type** reference **Properties** Create, Filter, Group, Sort,

Field	Details
	Description ID of the account that will gain access to data from `AccountTo`.
`AccountToId`	**Type** **reference** **Properties** Create, Filter, Group, Sort **Description** ID of the account sharing data with `AccountFrom`.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (`LastReferencedDate`) but not viewed it.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the account relationship.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the user who created the account relationship.

Field	Details
`Type`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The relationship type. All account relationship sharing rules of that type will be applied to this account relationship. Standard values are: • System Integrator • Agency • Advertiser • Reseller • Distributor • Developer • Broker • Lender • Institution • Contractor • Dealer • Consultant • Client • Vendor • Agent • Retailer • SubContractor • Supplier Picklist items can be updated with your own values.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

AccountRelationshipFeed
Feed tracking is available for the object.

AccountRelationshipHistory
History is available for tracked fields of the object.

AccountRelationshipOwnerSharingRule
Sharing rules are available for the object.

AccountRelationshipShare
Sharing is available for the object.

AccountRelationshipShareRule

Represents the rule that determines which object records are shared, how they are shared, the account relationship type that shares the records, and the level of access granted to the records. This object is available in API version 45.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`. `describeSObjects()`, `query()`, `retrieve()`, `update()`. `upsert()`

Fields

Field	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Type of access granted by the share rule. Valid values are: • `Read` (Read Only) • `Edit` (Read/Write)
`AccountToCriteriaField`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Criteria that must be met for the data to be shared. Possible values are: • `Account.OwnerId` • `Account.ParentId` • `Campaign.OwnerId` • `Case.AccountId` • `Case.OwnerId` • `Contact.AccountId` • `Contact.OwnerId` • `Lead.ConvertedAccountId` • `Lead.OwnerId` • `Lead.PartnerAccountId` • `Opportunity.AccountId` • `Opportunity.OwnerId`

Field	Details
	• `Opportunity.PartnerAccountId` • `Order.AccountId` • `Order.ActivatedById` • `Order.CompanyAuthorizedById` • `Order.OwnerId` • `PartnerFundAllocation.CreatedById` • `PartnerFundAllocation.ChannelPartnerId` • `PartnerFundAllocation.OwnerId` • `PartnerFundClaim.CreatedById` • `PartnerFundClaim.OwnerId` • `PartnerFundRequest.ChannelPartnerId` • `PartnerFundRequest.CreatedById` • `PartnerFundRequest.OwnerId` • `PartnerMarketingBudget.CreatedById` • `PartnerMarketingBudget.ChannelPartnerId` • `PartnerMarketingBudget.OwnerId`
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A meaningful explanation of the sharing rule.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the record in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This field is automatically generated but you can supply your own value if you create the record using the API. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`EntityType`	**Type** picklist

Field	Details
	Properties Create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of data shared by this rule. Values are: • `Account` • `Campaign` • `Case` • `Contact` • `Lead` • `Opportunity` • `Order` • `PartnerFundAllocation` • `PartnerFundClaim` • `PartnerFundRequest` • `PartnerMarketingBudget`
`Language`	**Type** picklist **Properties** Create, Defaulted on create. Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the account relationship share rule.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The label assigned to the sharing rule to identify it.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values.

Field	Details
	• In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
`StaticFormulaCriteria`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** A way to further filter what data gets shared. This must be a deterministic formula and spanning is not allowed.
`Type`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Must match the type of an account relationship for data to be shared according to the `AccountToCriteriaField` and the `StaticForumulaCriteria`.

AccountShare

Represents a sharing entry on an Account.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Summer '20 and later, only users with access to the Account object can access this object.

Special Access Rules

Customer Portal users can't access this object.

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field	Details
`AccountAccessLevel`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the User or Group has to the Account. The possible values are: • `Read` • `Edit` • `All` (This value isn't valid for create or update calls.) This field must be set to an access level that is at least equal to the organization's default Account access level. In addition, either this field, the `OpportunityAccessLevel` field, or the `CaseAccessLevel` field must be set higher than the organization's default access level.
`AccountId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the Account associated with this sharing entry. This field can't be updated.
`CaseAccessLevel`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the User or Group has to cases associated with the account. The possible values are: • `None` • `Read` • `Edit` This field must be set to an access level that is at least equal to the organization's default `CaseAccessLevel`. This field can't be updated via the API if the `AccountAccessLevel` field is set to `All`. You can't update this field for the associated account owner via the API. You must update the account owner's `CaseAccessLevel` via the Salesforce user interface.

Field	Details
ContactAccessLevel	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Level of access that the User or Group has to contacts associated with the account. The possible values are: • None • Read • Edit This field must be set to an access level that is at least equal to the organization's default ContactAccessLevel. This field can't be updated via the API if the ContactAccessLevel field is set to "Controlled by Parent." You can't update this field for the associated account owner using the API. You must update the account owner's ContactAccessLevel via the Salesforce user interface.
OpportunityAccessLevel	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the User or Group has to opportunities associated with the Account. The possible values are: • None • Read • Edit This field must be set to an access level that is at least equal to the organization's default opportunity access level. This field can't be updated via the API if the AccountAccessLevel field is set to All. You can't use the API to update this field for the associated Account owner. You must update the Account owner's opportunityAccessLevel via the Salesforce user interface.
RowCause	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can only write to this field when its value is either omitted or set to Manual (default). You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Valid values include:

Field	Details
	• `Manual`—The User or Group has access because a User with "All" access manually shared the Account with the user or group. • `Owner`—The User is the owner of the Account • `Team`—The User or Group has team access (is an AccountTeamMember). • `Rule`—The User or Group has access via an Account sharing rule. • `GuestRule`—The user or group has access via an Account guest user sharing rule. • `ImplicitParent`—The User or Group has access because they're the owner of or have sharing access to records related to the account, such as opportunities, cases, contacts, contracts, or orders. • `GuestParentImplicit`—The guest user has access because they have access to records related to the Account, such as opportunities, cases, contacts, contracts, or orders. • `LpuParentImplicit`—The User has access because they have access to records related to the Account, which are owned by high-volume Experience Cloud site users and shared via a share group. • `LpuImplicit`—The User has access to records owned by high-volume Experience Cloud site users via a share group. • `PortalImplicit`—The Account is associated with the portal user. • `ARImplicit`—The User, who belongs to a partner or customer account, has access to the Account via an account relationship data sharing rule. • `Territory2AssociationManual`—With Enterprise Territory Management in API version 44.0 and earlier, the `TerritoryManual` reason code was written to `AccountShare` records when you manually assigned an account to a territory. In API version 45.0 and later, `Territory2AssociationManual` replaces all instances of `TerritoryManual`, and the `Territory2AssociationManual` reason code is written to `AccountShare` records when you manually assign an account to a territory. • `Territory`—The territory has access via a territory assignment rule. • `TerritoryManual`—Deprecated starting in API version 45.0 and replaced by the `Territory2AssociationManual` value.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the User or Group that has been given access to the Account. This field can't be updated.

Usage

This object allows you to determine which users and groups can view or edit Account records owned by other users.

If you attempt to create an AccountShare record that matches an existing record, the request updates any modified fields and returns the existing record.

For example, the following code finds all accounts owned by a user and manually shares them to a portal user.

```
QueryResult result = conn.query("SELECT Id FROM Account WHERE OwnerId = '005D0000001LPFB'");
// Create a new AccountShare object
List<AccountShare> shares = new ArrayList<AccountShare>();
for (SObject rec : result.getRecords()) {
      AccountShare share = new AccountShare();
     share.setAccountId(rec.getId());
     //Set the portal user Id to share the accounts with
     share.setUserOrGroupId("003D000000QA8Tl");
     share.setAccountAccessLevel("Edit");
     share.setOpportunityAccessLevel("Read");
     share.setCaseAccessLevel("Edit");
     shares.add(share);
}
conn.create(shares.toArray(new AccountShare[shares.size()]));
```

This code shares the accounts that the user owns at the time, but not those accounts that are owned later. For these types of shares, use an owner-based sharing rule, such as AccountOwnerSharingRule.

If an account is shared in multiple ways with a user, you don't always see multiple sharing records. If a user has access to an account for one or more of the following RowCause values, the records in the AccountShare object are compressed into one record with the highest level of access.

- `ImplicitParent`
- `Manual`
- `Owner`

SEE ALSO:

Account
CaseShare
LeadShare
OpportunityShare

AccountTag

Associates a word or short phrase with an Account.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ItemId`	**Type** reference

Field Name	Details
	Properties Create, Filter **Description** ID of the tagged item.
`Name`	**Type** string **Properties** Create, Filter **Description** Name of the tag. If this value does not already exist, a new TagDefinition is created and becomes the parent of this Tag object. Otherwise, a TagDefinition with the same name becomes the parent of this Tag object. Parent relationships are created automatically.
`TagDefinitionId`	**Type** reference **Properties** Filter **Description** ID of the parent TagDefinition object that owns the tag.
`Type`	**Type** picklist **Properties** Create, Filter, Restricted picklist **Description** Defines the visibility of a tag. Valid values: • `Public`—The tag can be viewed and manipulated by all users in an organization. • `Personal`—The tag can be viewed or manipulated only by a user with a matching `OwnerId`.

Usage

AccountTag stores the relationship between its parent TagDefinition and the Account being tagged. Tag objects act as metadata, allowing users to describe and organize their data.

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

AccountTeamMember

Represents a User who is a member of an Account team.

See also UserAccountTeamMember, which represents a User who is on the default account team of another user.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- This object is available only for Enterprise, Unlimited, and Performance Edition users who have enabled the account team functionality.
- Customer Portal users can't access this object.

Fields

Field Name	Details
`AccountAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Level of access that the User has to the Account. The possible values are: • `Read` • `Edit` • `All` This field must be set to an access level that is at least equal to the organization's default Account access level. In addition, the users's `AccountAccessLevel`, `ContactAccessLevel`, `OpportunityAccessLevel`, or `CaseAccessLevel` field must be set higher than the organization's default access level.
`AccountId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the Account to which this user is a team member. Must be a valid account ID.
`CaseAccessLevel`	**Type** picklist

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** Level of access that the User has to cases associated with the account. The possible values are: • `None` • `Read` • `Edit` This field must be set to an access level that is at least equal to the organization's default case access level. In addition, the users's `AccountAccessLevel`, `ContactAccessLevel`, `OpportunityAccessLevel`, or `CaseAccessLevel` field must be set higher than the organization's default access level. This field is available in API version 37.0 and later.
`ContactAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Level of access that the User has to contacts associated with the account. The possible values are: • `None` • `Read` • `Edit` This field must be set to an access level that is at least equal to the organization's default contact access level. In addition, the users's `AccountAccessLevel`, `ContactAccessLevel`, `OpportunityAccessLevel`, or `CaseAccessLevel` field must be set higher than the organization's default access level. This field is available in API version 37.0 and later.
`CurrencyIsoCode`	**Type** picklist **Properties** Filter, Restricted picklist **Description** Available only for orgs with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the org.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter

Field Name	Details
	Description Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**. Note: An AccountTeamMember record that is deleted is not moved to the Recycle Bin. A deleted AccountTeamMember record can't be undeleted unless the record was cascade-deleted when deleting a related Account. For directly deleted AccountTeamMember records, don't use the isDeleted field to detect deleted records in SOQL queries or `queryAll()` calls. Instead, use `getDeleted()`.
`OpportunityAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Level of access that the User has to opportunities associated with the account. The possible values are: • `None` • `Read` • `Edit` This field must be set to an access level that is at least equal to the organization's default opportunity access level. In addition, the users's `AccountAccessLevel`, `ContactAccessLevel`, `OpportunityAccessLevel`, or `CaseAccessLevel` field must be set higher than the organization's default access level. This field is available in API version 37.0 and later.
`PhotoURL`	**Type** URL **Properties** Filter, Nillable, Sort, Group **Description** Read only. Retrieves the users Chatter photo URL. This field is available in API version 37.0 and later.
`TeamMemberRole`	**Type** picklist **Properties** Create, Filter, Nillable, Update **Description** Role associated with this team member. One of the valid team member roles defined for your organization. Label is **Team Role**.

Field Name	Details
`Title`	**Type** string **Properties** Filter, Nillable, Sort, Group **Description** Read only. Retrieves the user's title. This field is available in API version 37.0 and later.
`UserId`	**Type** reference **Properties** Create, Filter **Description** Required. ID of the User who is a member of this account team. Must be a valid User ID.

Usage

Use this object to manage the team members of a particular Account and to specify team member roles for those users on that account.

Behavior differs when an account owner adds a team member whose access is based on group sharing. If the account owner is changed, the team member with group-based access is removed from the team, even if the **Keep account team** option is selected.

SEE ALSO:

Account

AccountTerritoryAssignmentRule

An account assignment rule that assigns accounts to territories based on account fields. Only available if territory management has been enabled for your organization.

Note: The original territory management feature is scheduled for retirement for all customers as of Summer '21. After the feature is retired, users can't access the original territory management feature and its underlying data. We encourage you to migrate to Enterprise Territory Management. We also strongly recommend that you keep a comprehensive backup of your territory data while you're still using the original territory management feature. For more information, see The Original Territory Management Module Will Be Retired in the Summer '21 Release. The information in this topic applies to the original territory management feature only, and not to Enterprise Territory Management.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Spring ’20 and later, only users with the View Setup and Configuration permission can access this object, and only users with the Manage Territories permission can edit this object.

Fields

Field	Details
`BooleanFilter`	**Type** string **Properties** Create, Filter, Nillable, Update **Description** Advanced filter conditions that were specified for the rule in the online application. For example, “(1 AND 2) OR 3.”
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Update **Description** Indicates whether the rule is active (`true`) or inactive (`false`). Via the API, active rules run automatically when new accounts are created and existing accounts are edited. The exception is when the `IsExcludedFromRealign` field on an account is `true`, which prevents account assignment rules from evaluating that account.
`IsInherited`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Update **Description** Indicates whether the rule is an inherited rule (`true`) or a local rule (`false`). An inherited rule also acts upon territories below it in the territory hierarchy. A local rule is created at the immediate territory and only impacts the immediate territory.
`Name`	**Type** string **Properties** Create, Filter, Update **Description** A name for the rule. Limit is 80 characters.

Field	Details
`TerritoryId`	**Type** reference **Properties** Create, Filter, Update **Description** ID of the territory where accounts that satisfy this rule are assigned.

Usage

A territory will not have any accounts (with the exception of manually assigned accounts) unless at least one account assignment rule is active for the territory.

SEE ALSO:
AccountTerritoryAssignmentRuleItem
Territory
UserTerritory

AccountTerritoryAssignmentRuleItem

A row of selection criteria for an AccountTerritoryAssignmentRule object. Only available if territory management has been enabled for your organization.

Note: The original territory management feature is scheduled for retirement for all customers as of Summer '21. After the feature is retired, users can't access the original territory management feature and its underlying data. We encourage you to migrate to Enterprise Territory Management. We also strongly recommend that you keep a comprehensive backup of your territory data while you're still using the original territory management feature. For more information, see The Original Territory Management Module Will Be Retired in the Summer '21 Release. The information in this topic applies to the original territory management feature only, and not to Enterprise Territory Management.

AccountTerritoryAssignmentRuleItem can be created or deleted if the `BooleanFilter` field on its corresponding AccountTerritoryAssignmentRule object is a null value.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Spring '20 and later, only users with the View Setup and Configuration permission can access this object, and only users with the Manage Territories permission can edit this object.

Fields

Field	Details
`Field`	**Type** picklist **Properties** Create, Filter, Group, Sort, Update **Description** The standard or custom account field to use as a criteria.
`Operation`	**Type** picklist **Properties** Create, Filter, Group, Sort, Update **Description** The criteria to apply, such as “equals” or “starts with.”
`RuleID`	**Type** reference **Properties** Create, Filter, Update **Description** ID of the associated AccountTerritoryAssignmentRule.
`SortOrder`	**Type** int **Properties** Create, Filter, Update **Description** The order in which this row is evaluated compared to other AccountTerritoryAssignmentRuleItem objects for the given AccountTerritoryAssignmentRule.
`Value`	**Type** string **Properties** Create, Filter, Nillable, Update **Description** The field value(s) to evaluate, such as `94105` if the `Field` is `Billing Zip/Postal Code`.

Usage

- Both standard and custom account fields can be used as criteria for account assignment rules.
- A territory will not have any accounts (with the exception of manually assigned accounts) unless at least one account assignment rule is active for the territory.

SEE ALSO:

AccountTerritoryAssignmentRule

Territory

UserTerritory

AccountTerritorySharingRule

Represents the rules for sharing an Account within a Territory.

Note: The original territory management feature is scheduled for retirement for all customers as of Summer '21. After the feature is retired, users can't access the original territory management feature and its underlying data. We encourage you to migrate to Enterprise Territory Management. We also strongly recommend that you keep a comprehensive backup of your territory data while you're still using the original territory management feature. For more information, see The Original Territory Management Module Will Be Retired in the Summer '21 Release. The information in this topic applies to the original territory management feature only, and not to Enterprise Territory Management.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`AccountAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of sharing being allowed. The possible values are: • `Read` • `Edit` • `All`

Field	Details
CaseAccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of access granted to the target group for all child cases of the account. The possible values are: • `None` • `Read` • `Edit`
ContactAccessLevel	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** A value that represents the type of access granted to the target group for all related contacts on the account. The possible values are: • `None` • `Read` • `Edit` Note: This field is read only.
Description	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters. This field is available in API version 29.0 and later.
DeveloperName	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With

Field	Details
	this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. This field is available in API version 24.0 and later. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group. Accounts owned by users in the source territory trigger the rule to give access.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.
`OpportunityAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of access granted to the target group for all opportunities associated with the account. The possible values are: • `None` • `Read` • `Edit`
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the user or group being given access, or, if a territory ID, the users assigned to that territory.

Usage

Use this object to manage the sharing rules for a particular object. General sharing and Territory-related sharing use this object.

SEE ALSO:

- Account
- AccountShare

AccountUserTerritory2View

Represents the view of the Users in Assigned Territories related list in Lightning Experience. Available in API version 42.0 and later.

Note: This information applies to Enterprise Territory Management and not to the original territory management feature.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

As of Summer '20 and later, only standard and partner users can access this object.

Fields

Field Name	Details
`AccountId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Unique identifier for the account associated with the Users in Assigned Territories related list.
`RoleInTerritory2`	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** The role of each user in the Users in Assigned Territories related list.
`Territory2Id`	**Type** reference

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** Unique identifier for each territory in the Users in Assigned Territories related list.
`UserId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Unique identifier for each user in the Users in Assigned Territories related list.

Usage

Use this object to show the users who are assigned to the territories assigned to an account.

A filter criterion with one `AccountId` is required when you execute a SOQL query on this object.

ActionCadence

Represents the definition of a sales cadence. This object is available in API version 45.0 and later.

Use ActionCadence and its related objects to learn about a sales cadence, including:

- The current state of the sales cadence.
- The steps that the sales cadence contains.
- Which leads, contacts, or person accounts are assigned to the sales cadence.

The ActionCadence, ActionCadenceStep, ActionCadenceRule, and ActionCadenceRuleCondition objects define a sales cadence and the steps that it contains. ActionCadenceTracker and ActionCadenceStepTracker track a prospect's movement through an active sales cadence.

By learning when the sales cadence objects are created and deleted, you can make the most of the sales cadence API.

- An ActionCadence record is created when you use the High Velocity Sales app to create a sales cadence.
- An ActionCadenceStep record is created to represent a step. If the step is a branch step, then corresponding ActionCadenceRule and ActionCadenceRuleCondition records are also created.
- An ActionCadenceTracker record is created when you assign a prospect to a sales cadence.
- An ActionCadenceStepTracker record is created each time the prospect moves to a new step.

All of these sales cadence records exist until you use the High Velocity Sales app to delete a sales cadence. If many prospects have been assigned to the sales cadence, there can be many associated ActionCadenceTracker and ActionCadenceStepTracker records. In this case, deleting the sales cadence can take some time. While the sales cadence is being deleted, the ActionCadence record is in the Deleting state.

Supported Calls

`delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`,

Fields

Field	Details
`ActivatedDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** The date that the user activated the sales cadence. ActionCadence objects are created in a draft state and must be manually activated before they are used.
`Description`	**Type** textarea **Properties** Nillable, Update **Description** The description of this sales cadence.
`ErrorMessage`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** If there was an error when activating the sales cadence, this field contains the error message.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date this object was last referenced.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date this sales cadence was last viewed in the High Velocity Sales app.

Field	Details
`Name`	**Type** string **Properties** Filter, Group, idLookup, Sort, Update **Description** The name of this sales cadence. Every sales cadence in an org must have a unique name.
`OwnerId`	**Type** reference **Properties** Filter, Group, Sort, Update **Description** The ID of the owner of the sales cadence (typically the user who created it). Note: To change the owner of a sales cadence, the new owner must have read access to sales cadences enabled in their user profile.
`State`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** This entity's state. Possible values are: • `Active` The user finished modifying the sales cadence and has activated it. At this point, you can't make any more changes to the steps in the sales cadence. • `Deleting` All records associated with this sales cadence, including the ActionCadence record and all its related records, are being deleted. While in this state, the ActionCadence cannot be attached to a prospect. • `Draft` ActionCadence objects are in the draft state when they are created. In this state, the ActionCadence cannot be assigned to any prospect. • `Error` An error occurred while trying to activate the sales cadence. • `Inactive` The user deactivated the sales cadence. New targets can’t be added to the sales cadence. Existing targets continue in the sales cadence until completion.

Usage

Use ActionCadence to learn how many sales cadences are currently active:

```
select COUNT() from ActionCadence where State="Active"
```

Retrieve all ActionCadence records that have "West Coast" in their name:

```
SELECT ActionCadenceId FROM ActionCadence WHERE NAME LIKE '[West Coast Cadence]%'
```

Retrieve all ActionCadence records owned by a specific user:

```
SELECT ActionCadenceId  FROM ActionCadence WHERE OwnerId = '<owner id>'
```

SEE ALSO:

ActionCadenceRule

ActionCadenceRuleCondition

ActionCadenceStep

ActionCadenceStepTracker

ActionCadenceRule

Represents the logic that a branch step uses to make decisions in your sales cadence. Use ActionCadenceRule to learn about a branch step, including its logic and what the next step is. This object is available in API version 48.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`ActionCadenceStepId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ActionCadenceStep that this rule is associated with.
`ConditionLogic`	**Type** string **Properties** Filter, Group, Sort **Description** The logical operator used to evaluate the rule conditions. Possible values are:

Field	Details
	• `AND` If this rule has several conditions, all of them must be `true` for this step to be `true`.
`GlobalEventType`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** If the action cadence rule contains a global exit condition, this field contains the type of event that the rule represents. Possible values are: • `EmailReply` • `EmailHardBounce` • `EmailSoftBounce` • `CallMeaningfulConnect` • `CallNotInterested` • `CallUnqualified` • `CallLeftVoicemail` • `CallCallBackLater` This field is available in API version 49.0 and later.
`OutcomeNextStepName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The next step in the sales cadence if this rule evaluates as `true`. If this rule evaluates as `false`, the next step is `ActionCadenceStep.BranchDefaultStepName`.
`ParentRuleName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The value of the `RuleName` field of the previous rule in the sales cadence. Must contain a valid rule name value unless this rule is the root rule. `null` if this rule is a root rule. This field is available in API version 49.0 and later.

Field	Details
`RuleName`	**Type** string **Properties** Filter, Group, Sort **Description** The name given to the rule. Every rule in a sales cadence must have a unique name.
`RuleType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of step that this rule applies to. Possible values are: • `BranchStep` — The rule evaluates the condition of a branch step. A branch step is an ActionCadenceStep record with the field `type` equal to `Branch`. • `RootStep`— The rule evaluates a global exit condition. This field is available in API version 49.0 and later.

Usage

Use ActionCadenceRule to see all the rules associated with a branch step:

```
select RuleName from ActionCadenceRule  where ActionCadenceStep.ActionCadence.Name = "High
 Priority CFO"
```

SEE ALSO:
ActionCadence
ActionCadenceRuleCondition
ActionCadenceStep
ActionCadenceStepTracker

ActionCadenceRuleCondition

Represents the logic for a branch step. This object is available in API version 48.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`ActionCadenceRuleId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the ActionCadenceRule that this condition is associated with.
`Operator`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The conditional operator for this rule. Possible values are: • `Equal`
`Resource`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The field to evaluate. Possible values are: • `CallDispositionCategory` Use by branch steps. • `EmailEngagement` Used by ListenerBranch steps.
`RuleConditionName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the rule condition. Every rule condition in a sales cadence must have a unique name.
`Value`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description The event that your sales cadence rule condition listens for to decide when the event is complete. Possible values for emails are: • `EmailOpen` • `EmailLinkClick` Possible values for calls are: • `CallMeaningfulConnect` • `CallUnqualified` • `CallLeftVoicemail` • `CallNotInterested` • `CallCallBackLater`

Usage

Use ActionCadenceRuleContion to see all the rule conditions associated with a branch step:

```
select RuleConditionName from ActionCadenceRuleCondition where ActionCadenceStepId= <ID
of a branch step>
```

SEE ALSO:

ActionCadence

ActionCadenceRule

ActionCadenceStep

ActionCadenceStepTracker

ActionCadenceStep

Represents a step in a sales cadence. Use ActionCadenceStep to learn which steps belong to a sales cadence, and how the steps are connected to each other. This object is available in API version 48.0 and later.

An ActionCadenceStep record is created to represent a step. If the step is a branch step, then corresponding ActionCadenceRule and ActionCadenceRuleCondition records are also created.

Note: An ActionCadenceStep with `IsOrphan` equal to `true` can be part of a sales cadence but is never executed. To retrieve the steps that can be executed by the sales cadence, query for ActionCadenceStep records with `IsOrphan` equal to `false`. ActionCadenceStep records with `IsOrphan` equal to `true` will be deleted.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`ActionCadenceId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the ActionCadence that this step belongs to.
`AllCallsCallBackLater`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of calls having the call outcome **Call Back Later**.
`AllCallsLeftVoicemail`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of calls having the call outcome **Left Voicemail**.
`AllCallsMeaningfulConnect`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of calls having the call outcome **Meaningful Connect**.
`AllCallsNotInterested`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of calls having the call outcome **Not Interested**.
`AllCallsUncategorized`	**Type** int **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The number of calls where the call outcome is not categorized.
`AllCallsUnqualified`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of calls having the call outcome **Unqualified**.
`AllEmailsBouncedCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of emails that were not delivered successfully.
`AllEmailsDeliveredCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of emails delivered.
`AllEmailsHardBouncedCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of emails returned for a permanent reason — for example, the email address does not exist. This field is available in API version 50.0 and later.
`AllEmailsLinkClickedCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of links inside an email that the sales rep clicked during this step. Multiple clicks on the same link count towards this total. This field is available in API version 50.0 and later.
`AllEmailsOpenedCount`	**Type** int

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** The number of emails that the sales rep opened while working on this step. Multiple opens of the same email count towards this total.
AllEmailsOutOfOfficeCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of emails that were returned because the recipient set an out-of-office responder. Multiple replies count towards this total. This field is available in API version 50.0 and later.
AllEmailsRepliedCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of emails that the sales reps replied to as part of this step. Multiple replies to the same email count towards this total, This field is available in API version 50.0 and later.
AllEmailsSentCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of sent emails.
AllEmailsSoftBouncedCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of emails that were returned for temporary reasons — for example, the email is too large. This field is available in API version 50.0 and later.
AllManuallyCompletedCount	**Type** int **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The number of steps manually completed.
AllOnTimeCompletedCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of steps completed on time.
AllOverdueCompletedCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of overdue steps that were completed.
AllSkippedCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of steps skipped.
AllTotalCallsCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of calls that the sales rep made during this step.
BranchDefaultStepName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the default step.
ChainedCadenceId	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The ID of the ActionCadence for the linked sales cadence. Available only if the step type is `DaisyChain` (meaning that another sales cadence is connected to this sales cadence).
`IsImmediateWakeUp`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description**
`IsOrphan`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, this step is not executed by the sales cadence and will be deleted. Steps with `IsOrphan` equal to `true` have `ParentStepName` equal to `null`. Note: To retrieve the active steps in a sales cadence, include `IsOrphan=false` in your query. The default value is false. This field is available in API version 49.0 and later.
`IsThreaded`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** This field is valid for email steps. Email steps have ActionCadence.StepType equal to `SendAnEmail`. If `true`, the email for this email step is sent as a reply to the email conversation from the previous email step. By sending the email as a reply to a previous email, customers see a "conversation" view of the emails. Only emails from the same sales cadence are grouped as conversations. This field cannot be true for the first email step in a sales cadence, because the first email from a sales cadence must start a new conversation with the prospect. The default value is false. This field is available in API version 49.0 and later.
`ParentStepName`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The step name (`ActionCadenceStep.StepName`) of the previous step in the sales cadence. Must contain a valid step name value unless this step is the root step. `null` if this step is a parent step.
`RootStepId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the root step for this sales cadence. Every sales cadence has exactly one root step (so that the Salesforce api can find all the steps for this cadence).
`StepComments`	**Type** textarea **Properties** Nillable **Description** A comment that provides additional information about this step.
`StepName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Unique identifier for this step. Generated by Salesforce.
`StepTitle`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The title given to the step when it was created.
`TemplateId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** If a template was added to this step, this field contains the template's ID. For example, if this step is a call step it can contain a template for a call script. Or, if this step is an email step, it can contain a template for an email.

Field	Details
Type	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of step. Possible values are: • AutoSendAnEmail — Salesforce automatically sends the specified email. • Branch — A branch step in the sales cadence. • CreateTask — Used for custom steps. • DaisyChain — A daisy chain step. A daisy chain step connects this sales cadence to another sales cadence. It must be the last step in the path. • ListenerBranch — A branch step for emails. • MakeACall — The sales rep must call the prospect at this step. • Root — This step is the root step for the sales cadence. • SendAnEmail — The sales rep must send the prospect an email at this step. • Wait — A wait step tells the sales rep not to do anything at this point in the sales cadence.
UniqueEmailsLinkClickedCount	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The number of links inside an email that the sales rep clicks during this step. Multiple clicks on the same link are not counted. This field is available in API version 50.0 and later.
UniqueEmailsOpenedCount	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The number of emails that the sales rep opens as part of this step. Multiple openings of the same email are not counted. This field is available in API version 50.0 and later.
UniqueEmailsRepliedCount	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The number of emails that the sales rep replies to as part of this step. Multiple replies to the same email are not counted. This field is available in API version 50.0 and later.

Field	Details
`WaitTimeInSeconds`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Required if the step type is `Wait`. The time in seconds for this step to wait.

Usage

Use ActionCadenceStep to see what steps your sales cadence has:

```
select StepTitle from ActionCadenceStep where ActionCadence.ID= <the id of an action
cadence> and IsOrphan=false
```

SEE ALSO:

ActionCadence

ActionCadenceRule

ActionCadenceRuleCondition

ActionCadenceStepTracker

ActionCadenceStepTracker

Represents a step in an active sales cadence for a specific sales cadence target. This object is available in API version 48.0 and later.

An ActionCadenceStepTracker record is created when a target moves to a new step in a sales cadence. Use ActionCadenceStepTracker to find information such as the step's current state, the reason it completed, and its type.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`ActionCadenceId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the ActionCadence that is related to the ActionCadenceStep.

Field	Details
ActionCadenceName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the related ActionCadence object.
ActionCadenceStepId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ActionCadenceStepTracker is the runtime version of an ActionCadenceStep. This field contains the ID of the related ActionCadenceStep.
ActionCadenceTrackerId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the related ActionCadenceTracker.
ActionTakenDateTime	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the action described in this step was taken.
CompletedById	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The user ID of the sales rep who completed this step. A step can be assigned to several users before it’s completed. This field is available in API version 50.0 and later.
CompletionDate	**Type** dateTime **Properties** Filter, Nillable, Sort

Field	Details
	Description The date this step completed. A step is completed either when the action is taken, or the step is skipped.
`CompletionReason`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The reason that this step completed: Possible values are: • `AutomaticallyCompleted` — the sales rep successfully completed this step and moved to the next one. Salesforce automatically marks this step as completed. • `AutomaticallyExited` — the step exited because a global exit condition occurred. This value is available in API version 49.0 and later. • `ManuallyCompleted` — the sales rep manually marked this step as completed. • `ManuallySkipped` — the sales rep skipped this step.
`DueDateTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Some steps have a due date to indicate when they must be completed. If this step has been assigned a due date, this field contains the date and time it is due.
`IsActionTaken`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** `true` if the sales rep completed an action during this step, such as making a phone call, otherwise `false`.
`SecondsOverdue`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** If this step has a due date that has passed, this field contains the number of seconds that has elapsed since the due date.

Field	Details
`State`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The current state of this step. Possible values are: Possible values are: • `Active` — the current step that the sales rep is performing. There can only be one active step for a given target. • `Cancelled` — the sales rep canceled the step. Salesforce doesn't run any canceled steps. • `Completed` — this step is finished. Either the work in the step completed, or the step was skipped. • `Error` — an error occurred while executing this step. • `InProgress` — the sales rep has started the step, but it isn't yet completed. • `Paused` — the sales rep paused the step. • `Scheduled` — used for email steps. An email can be scheduled to be sent later. • `Queued` — used for automated email steps. The email step has started but the email is waiting in the queue to be sent.
`StepTitle`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the related step.
`StepType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of step to execute. Possible values are: • `AutoSendAnEmail` • `Branch` • `CreateTask` • `DaisyChain` • `ListenerBranch` • `MakeACall` • `Root`

Field	Details
	• `SendAnEmail` • `Wait`
`TargetId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the prospect that is assigned to this sales cadence.
`WasEverPaused`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the sales rep had ever paused this step `(true)`, or not `(false)`. This field is available in API version 50.0 and later.

Usage

List all the steps that this prospect has completed in a given sales cadence:

```
select StepTitle from ActionCadenceStepTracker where TargetID = <target ID> and
ActionCadenceId=<action cadence id> and StepType="Completed"
```

SEE ALSO:

ActionCadence

ActionCadenceRule

ActionCadenceStep

ActionCadenceRuleCondition

ActionCadenceTracker

Represents an active sales cadence target. This object is available in API version 45.0 and later.

An ActionCadenceTracker record is created when you add a target to a sales cadence. Use ActionCadenceTracker to learn about a running sales cadence target, including its state, current step, assigned prospect, and reason for completion.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
ActionCadenceId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the related ActionCadence.
CompletionDisposition	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** The target's disposition when it exited the sales cadence. This field contains a value if the target's state is `Completed`. Sales reps can set this value when removing a target from a sales cadence. This field is available in API version 51.0 and later. Possible values are: • `Bad Data` — some of the target's data is incorrect or invalid. • `Contact Later` — the target asked to be contacted at a later date. • `Customer Connected` — the sales rep contacted the target. • `Customer Engaged` — the target engaged with an email. • `Disqualified`— a sales rep determined that the target is not qualified. • `Duplicate` — the target has a duplicate lead, contact, or person account record. • `No Response` — the target did not reply to any outreach. • `Not Interested` — the target stated a lack of interest. • `Success` — the sales cadence outreach was successful.
CompletionReason	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The reason that the target completed the sales cadence. This field contains a value if the target's state is `Completed`. Possible values are: • `AutomaticallyExited` — the target completed because a global exit condition occurred. This value is available in API version 49.0 and later. • `DaisyChained` — the target completed because it's connected to another sales cadence. • `LeadConverted` — the target completed because the lead converted. • `ManuallyRemoved` — the target completed because the sales rep removed it from the sales cadence.

Field	Details
	• `ManuallyRemovedNoAccess`— reserved for future use. • `NoMoreSteps` — the target completed the sales cadence because all the sales cadence steps were completed.
`CurrentStepId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the current ActionCadenceStepTracker.
`ErrorMessage`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** If an error occurs while this target is being completed, this field contains the error message.
`ExitGlobalRuleId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** If a global exit condition occurs, a target completes. One example of a global exit condition is an email returned because of an invalid address. If the target completed because a global exit condition occurred, this field contains the ID of the ActionCadenceRule record that evaluated as `true`. This field is available in API version 49 and later.
`IsTrackerActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the action cadence target is active `(true)` or not `(false)`. An action cadence target is active if the state is `Running`, `Paused`, `Processing`, or `Initializing`. Only active targets count against the org limit of 150,000 trackers. This field is available in API version 50 and later.
`LastCompletedStepId`	**Type** reference

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** The ID of the last completed ActionCadenceStepTracker.
`OwnerId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the user who is assigned to complete the sales cadence steps for the target.
`State`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The state of the current step. Possible values are: • `Complete` • `Error` • `Initializing` • `Paused` • `Processing`—Salesforce is working on changing the state of this step. We recommend that you filter out steps that have this state from your dashboards. • `Running`
`TargetId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the target that is assigned to this sales cadence.

Usage

Use ActionCadenceTracker to see what targets are currently assigned to an active sales cadence.

```
select TargetId from ActionCadenceTracker where ActionCadenceId=<Id of the sales cadence>
 and State= "Running"
```

ActionLinkGroupTemplate

Action link templates let you reuse action link definitions and package and distribute action links. An action link is a button on a feed element. Clicking on an action link can take a user to another Web page, initiate a file download, or invoke an API call to an external server or Salesforce. Use action links to integrate Salesforce and third-party services into the feed. Every action link belongs to an action link group and action links within the group are mutually exclusive. This object is available in API version 33.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Only users with the "Customize Application" permission can modify or delete this object.

Fields

Field Name	Details
`Category`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The location of the action link group within the feed element. Values are: • `Primary`—The action link group is displayed in the body of the feed element. • `Overflow`—The action link group is displayed in the overflow menu of the feed element.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the action link group template to use in code.
`ExecutionsAllowed`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The number of times an action link can be executed. Values are:

Field Name	Details
	• `Once`—An action link can be executed only once across all users. • `OncePerUser`—An action link can be executed only once for each user. • `Unlimited`—An action link can be executed an unlimited number of times by each user. If the action link's `actionType` is `Api` or `ApiAsync`, you can't use this value.
`HoursUntilExpiration`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The number of hours from when the action link group is created until it's removed from associated feed elements and can no longer be executed. The maximum value is 8,760.
`IsPublished`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** If `true`, the action link group template is published. Action link group templates shouldn't be published until at least one ActionLinkTemplate is associated with it. Once set to `true`, this can't be set back to `false`.
`Language`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the `MasterLabel`.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the action link group template.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.

Usage

Define action link templates in Setup and use `ConnectApi` in Apex or Connect REST API to instantiate action links from the templates and to post feed elements with the action links.

If you delete a published action link group template, you delete all related action link information which includes deleting all action links that were instantiated using the template from feed items.

ActionLinkTemplate

Action link templates let you reuse action link definitions and package and distribute action links. An action link is a button on a feed element. Clicking an action link can take a user to another Web page, initiate a file download, or invoke an API call to an external server or Salesforce. Use action links to integrate Salesforce and third-party services into the feed. This object is available in API version 33.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Only users with the "Customize Application" permission can modify or delete this object.

Fields

Field Name	Details
`ActionLinkGroupTemplateId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the ActionLinkGroupTemplate with which this action link template is associated.
`ActionUrl`	**Type** textarea **Properties** Create, Update **Description** The action link URL. For example, a `Ui` action link URL is a Web page. A `Download` action link URL is a link to the file to download. `Ui` and `Download` action link URLs are provided to clients. An `Api` or `ApiAsync` action link URL is a REST resource. `Api` and `ApiAsync` action link URLs aren't provided to clients. Links to Salesforce can be relative. All other links must be absolute and start with `https://`. Links to resources hosted on Salesforce servers can be relative, starting with a `/`. All other links must be absolute and start with `https://`. This field can contain context variables and binding variables in the form `{!Bindings.`***`key`***`}`, for example, `https://www.example.com/{!Bindings.itemId}`. Set the binding variable's value when you instantiate the action link group from the template.
`Headers`	**Type** textarea **Properties** Create, Nillable, Update **Description** Template for the HTTP headers sent when corresponding action links are invoked. This field can be used only for `Api` and `ApiAsync` action links. This field can contain context variables and binding variables in the form `{!Bindings.`***`key`***`}`.
`IsConfirmationRequired`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field Name	Details
	Description If `true`, a confirmation dialog appears before the action is executed.
`IsGroupDefault`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** If `true`, action links derived from this template are the default or primary action in their action groups. There can be only one default action per action group.
`Label`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A custom label to display on the action link button. If none of the `LabelKey` values make sense for an action link, use a custom label. Set the `LabelKey` field to `None` and enter a label name in the `Label` field. Action links have four states: new, pending, success, and failed. These strings are appended to the label for each state: • *Label* • *Label* Pending • *Label* Success • *Label* Failed For example, if the value of `Label` is “Call Home,” the values of the four action link states are: Call Home, Call Home Pending, Call Home Success, and Call Home Failed. If `LabelKey` has any value other than `None`, the `Label` field is empty.
`LabelKey`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Key for the set of labels to display for these action link states: new, pending, success, failed. For example, the Approve set contains these labels: Approve, Pending, Approved, Failed. For a complete list of keys and labels, see Action Links Labels in the *Connect REST API Developer Guide* or the *Apex Developer Guide*. If none of the label key values make sense for an action link, set this field to `None` and enter a custom label name in the `Label` field.

Field Name	Details
`LinkType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of action link. One of these values: • `Api`—The action link calls a synchronous API at the action URL. Salesforce sets the status to `SuccessfulStatus` or `FailedStatus` based on the HTTP status code returned by your server. • `ApiAsync`—The action link calls an asynchronous API at the action URL. The action remains in a `PendingStatus` state until a third party makes a request to `/connect/action-links/`***`actionLinkId`*** to set the status to `SuccessfulStatus` or `FailedStatus` when the asynchronous operation is complete. • `Download`—The action link downloads a file from the action URL. • `Ui`—The action link takes the user to a web page at the action URL.
`Method`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** HTTP method for the action URL. One of these values: • `HttpDelete`—Returns HTTP 204 on success. Response body or output class is empty. • `HttpGet`—Returns HTTP 200 on success. • `HttpHead`—Returns HTTP 200 on success. Response body or output class is empty. • `HttpPatch`—Returns HTTP 200 on success or HTTP 204 if the response body or output class is empty. • `HttpPost`—Returns HTTP 201 on success or HTTP 204 if the response body or output class is empty. Exceptions are the batch posting resources and methods, which return HTTP 200 on success. • `HttpPut`—Return HTTP 200 on success or HTTP 204 if the response body or output class is empty. `Ui` and `Download` action links must use `HttpGet`.
`Position`	**Type** int **Properties** Create, Filter, Group, Sort, Update

Field Name	Details
	Description An integer specifying the position of the action link template relative to other action links in the group. 0 is the first position.
`RequestBody`	**Type** textarea **Properties** Create, Nillable, Update **Description** Template for the HTTP request body sent when corresponding action links are invoked. This field can be used only for `Api` and `ApiAsync` action links. This field can contain context variables and binding variables in the form `{!Bindings.`***`key`***`}`.
`UserAlias`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** If you selected `CustomUser` or `CustomExcludedUser` for `UserVisibility`, this field is the alias for the custom user. Use the alias in a template binding to specify the custom user when an action link group is created using the template.
`UserVisibility`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Who can see the action link. This value is set per action link, not per action link group. One of these values: • `Creator`—Only the creator of the action link can see the action link. • `Everyone`—Everyone can see the action link. • `EveryoneButCreator`—Everyone but the creator of the action link can see the action link. • `Manager`—Only the manager of the creator of the action link can see the action link. • `CustomUser`—Only the custom user can see the action link. • `CustomExcludedUser`—Everyone but the custom user can see the action link.

Usage

Create action link templates in Setup. Use Apex classes in the `ConnectApi` namespace or Connect REST API to instantiate action links from templates and to post feed elements with the action links.

For information about action links, see “Working with Action Links” in the *Apex Developer Guide* or the *Connect REST API Developer Guide*.

ActionPlan

Represents the instance of an action plan, a set of tasks created from an action plan template. This object is used by more than one cloud in Industries.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`ActionPlanState`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The status of work being done for the action plan.. Possible values are: • `Not Started` • `In Progress` • `Canceled` • `Complete`
`ActionPlanTemplateVersionId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the version of the action plan template used to create this action plan. At creation, the referenced action plan template must be in the published state.
`ActionPlanType`	**Type** picklist

Field Name	Details
	Properties Create, Filter, Group, Restricted picklist, Sort **Description** The action plan's type. Possible values are: • `Industries` • `Visit Execution`
`IsUsingHolidayHours`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Indicates that task completion dates have been calculated by incrementing the task offset for each non-work day, excluding recurring holidays.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The most recent date on which a user referenced this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The most recent date on which a user viewed this record.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Name of the action plan.
`OwnerId`	**Type** reference

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the user who owns this record.
StartDate	**Type** date **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** The start date of this action plan.
TargetId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the parent object record that relates to this action plan. For API version 48 and later, supported parent objects are Account, AssetsAndLiabilities, BusinessMilestone, Campaign, Card, Case, Claim, Contact, Contract, Financial Account, Financial Goal, Financial Holding, InsurancePolicy, InsurancePolicyCoverage, Lead, Opportunity, PersonLifeEvent, ResidentialLoanApplication, and Visit as well as custom objects with activities enabled. For API version 47 and later, supported parent objects are Account, BusinessMilestone, Campaign, Case, Claim, Contact, Contract, InsurancePolicy, InsurancePolicyCoverage, Lead, Opportunity, PersonLifeEvent, and Visit as well as custom objects with activities enabled. For API version 46 and later, supported parent objects are Account, Campaign, Case, Contact, Contract, Lead, and Opportunity as well as custom objects with activities enabled. For API version 45 and earlier: the only supported parent object is Account.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ActionPlanOwnerSharingRule
Sharing rules are available for the object.

ActionPlanShare
Sharing is available for the object.

ActionPlanItem

Represents the instance of an action plan item. This object is used by more than one cloud in Industries.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`ActionPlanId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the action plan that this item belongs to.
`ActionPlanTemplateItemId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the action plan template item this item was created from.
`DisplayOrder`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort **Description** Order in which tasks are displayed.
`IsRequired`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this action plan item is required.
`ItemId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort **Description** The ID of the task created by this action plan item.
`ItemState`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The action plan item’s work state. Possible values are: • `Pending` • `In Progress` • `Completed` • `Canceled` • `Deleted`
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Name of this action plan item.

ActionPlanTemplate

Represents the instance of an action plan template. This object is used by more than one cloud in Industries.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`ActionPlanType`	**Type** picklist

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The action plan template's type. Possible values are: • Industries • Visit Execution
`Description`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The description of this action plan template.
`IsAdHocItemCreationEnabled`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether users can add tasks or other items to generated action plans.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The most recent date on which a user referenced this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The most recent date on which a user viewed this record.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update

Field Name	Details
	Description The name of this action plan template.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the user who owns this action plan template.
`TargetEntityType`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The parent object this action plan template relates to. For API Version 48 and higher, possible values are: • `Account` • `Business Milestone` • `Campaign` • `Case` • `Claim` • `Contact` • `Contract` • `Assets and Liabilities` • `Card` • `Financial Account` • `Financial Goal` • `Financial Holding` • `Insurance Policy` • `Insurance Policy Coverage` • `Lead` • `Opportunity` • `Person Life Event` • `Residential Loan Application` • `Visit` For API version 47 and later, supported parent objects are Account, BusinessMilestone, Campaign, Case, Claim, Contact, Contract, InsurancePolicy,

Field Name	Details
	InsurancePolicyCoverage, Lead, Opportunity, PersonLifeEvent, and Visit as well as custom objects with activities enabled. For API version 46 and later, supported parent objects are Account, Campaign, Case, Contact, Contract, Lead, and Opportunity as well as custom objects with activities enabled. For API version 45 and earlier: the only supported parent object is Account.
`UniqueName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name for this action plan template. This field is unique within your organization.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ActionPlanTemplateOwnerSharingRule
Sharing rules are available for the object.

ActionPlanTemplateShare
Sharing is available for the object.

ActionPlanTemplateItem

Represents the instance of an item on an action plan template version. This object is used by more than one cloud in Industries.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`ActionPlanTemplateVersionId`	**Type** reference **Properties** Create, Filter, Group, Sort

Field Name	Details
	Description The version of the action plan template this item is for.
`DisplayOrder`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The order in which this item is displayed within the action plan template version.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the task created from this template item is active.
`IsRequired`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the task created from this template item is required.
`ItemEntityType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of action plan template item entity. Always set to Task. Possible values are: • Assessment Task • RecordAction • Signature Task • Task
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort

Field Name	Details
	Description The most recent date on which a user referenced this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The most recent date on which a user viewed this record.
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique identifier for this action plan template item record.
UniqueName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name for this action plan template item. This field is unique within your organization.

ActionPlanTemplateItemValue

Represents the value associated with an action plan template item. This object is used by more than one cloud in Industries.

Supported Calls

create(), delete(), describeLayout(), describeSObjects(), getDeleted(), getUpdated(), query(), retrieve(), search(), undelete(), update(), upsert()

Fields

Field Name	Details
ActionPlanTemplateItemId	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** The ID of the action plan template item that this value relates to.
IsActive	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the task created from this template item is active.
ItemEntityFieldName	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The name of the field on the action plan template item that this value is for. Available fields include: • AssessmentTask.AssessmentTaskDefinitionId • AssessmentTask.Description • AssessmentTask.EndTime • AssessmentTask.IsRequired • AssessmentTask.Name • AssessmentTask.OwnerId • AssessmentTask.ParentId (Visit ID) • AssessmentTask.SequenceNumber • AssessmentTask.StartTime • AssessmentTask.Status • AssessmentTask.TaskDefinitionId • AssessmentTask.TaskType • DocumentChecklistItem.DocumentTypeId • DocumentChecklistItem.Instruction • DocumentChecklistItem.IsAccepted • DocumentChecklistItem.IsFrozen • DocumentChecklistItem.IsRequired • DocumentChecklistItem.Name • DocumentChecklistItem.OwnerId • DocumentChecklistItem.ParentRecordId

Field Name	Details
	• `DocumentChecklistItem.Status` • `DocumentChecklistItem.WhoId` • `RecordAction.ActionDefinition` • `RecordAction.ActionType` • `RecordAction.FlowDefinition` (Interaction Definition ID) • `RecordAction.FlowInterviewId` • `RecordAction.IsMandatory` • `RecordAction.IsUiRemoveHidden` (Hide Remove Action in UI) • `RecordAction.Order` • `RecordAction.Pinned` • `RecordAction.RecordId`(Parent Record ID) • `RecordAction.Status` • `Task.ActivityDate` (Due Date Only) • `Task.CallDisposition` • `Task.CallDurationInSeconds` • `Task.CallObject` • `Task.CallType` • `Task.Description` • `Task.IsRecurrence` • `Task.IsReminderSet` • `Task.OwnerId` (Assigned To ID) • `Task.Priority` • `Task.RecurrenceDayOfMonth` • `Task.RecurrenceDayOfWeekMask` • `Task.RecurrenceEndDateOnly` • `Task.RecurrenceInstance` • `Task.RecurrenceInterval` • `Task.RecurrenceMonthOfYear` • `Task.RecurrenceRegeneratedType` • `Task.RecurrenceStartDateOnly` • `Task.RecurrenceTimeZoneSidKey` • `Task.RecurrenceType` • `Task.ReminderDateTime` • `Task.Status` • `Task.Subject` • `Task.TaskSubtype` • `Task.WhatId` (Related To ID) • `Task.WhoId`

Field Name	Details
`ItemEntityType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of action plan template item. Possible values are: • `Assessment Task` • `Document Checklist Item` • `RecordAction` • `SignatureTask` • `Task`
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The most recent date on which a user referenced this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The most recent date on which a user viewed this record.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique identifier for this record.
`ValueFormula`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description A formula used to calculate the value for this action plan template item.
`ValueLiteral`	**Type** textarea **Properties** Create, Nillable, Update **Description** The value for this action plan template item.

ActionPlanTemplateVersion

Represents the version of an action plan template. This object is used by more than one cloud in Industries.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`ActionPlanTemplateId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the action plan template this version represents.
`ActivationDateTime`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort **Description** The date and time at which this version became active.
`InactivationDateTime`	**Type** dateTime

Field Name	Details
	Properties Create, Filter, Nillable, Sort **Description** The date and time at which this version became inactive.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The most recent date on which a user referenced this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The most recent date on which a user viewed this record.
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of this version item.
Status	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** The action plan template version’s state Default values are: Draft, Obsolete, and Published.
Version	**Type** int **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** The index number of this action plan template version.

ActiveScratchOrg

Represents an active scratch org. This object is available in API version 41.0 and later.

Supported Calls

`delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** A description of this scratch org.
`Edition`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The org edition of this scratch org. Possible values are `Group`, `Developer`, `Enterprise`, and `Professional`. This field is read-only.
`ExpirationDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Date when the scratch org expires. This field is read-only.
`Features`	**Type** textarea **Properties** Nillable **Description** The features enabled in this scratch org, such as `MultiCurrency`. See the *Salesforce DX Developer Guide* for the full list of valid features. This field is read-only.

Field Name	Details
HasSampleData	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Specifies whether the scratch org contains sample data. If set to `true`, the sample data is similar to the data in a Salesforce free trial org.
LastLoginDate	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** The date of the last user login to the scratch org. This field is read-only.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date this scratch org was last referenced. This field is read-only.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date this scratch org was last viewed. This field is read-only.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** The auto-generated ID of this scratch org. This field is read-only.
Namespace	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The namespace associated with this scratch org. This field is read-only.
`OrgName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the scratch org. This field is read-only.
`OwnerId`	**Type** reference **Properties** Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the user who owns this scratch org. This field is read-only.
`ScratchOrg`	**Type** string **Properties** Filter, Group, Sort **Description** The org ID of the scratch org. This field is read-only.
`ScratchOrgInfoId`	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** The id of the associated `ScratchOrgInfo` object. This field is read-only.
`SignupEmail`	**Type** email **Properties** Filter, Group, Nillable, Sort **Description** The email address of the Administration user. This field is read-only.
`SignupInstance`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The Salesforce instance on which this scratch org resides. This field is read-only.
`SignupTrialDays`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of days between the scratch org's creation and expiration. This field is read-only.
`SignupUsername`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The username of the Administration user of the scratch org. This field is read-only.
`Template`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The template used to create this scratch org. This field is read-only.

Usage

Salesforce automatically creates an instance of this object after a `ScratchOrgInfo` record moves to the Active state. The new `ActiveScratchOrg` gets many of its field values from the `ScratchOrgInfo` object with which it is associated.

When you delete an `ActiveScratchOrg` record, its associated scratch org is deleted and its associated `ScratchOrgInfo` record is moved to the Deleted state.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ActiveScratchOrgFeed
Feed tracking is available for the object.

ActiveScratchOrgHistory
History is available for tracked fields of the object.

ActiveScratchOrgOwnerSharingRule
Sharing rules are available for the object.

ActiveScratchOrgShare

Sharing is available for the object.

SEE ALSO:

ScratchOrgInfo

NamespaceRegistry

Salesforce DX Developer Guide

ActivityHistory

This read-only object is displayed in a related list of closed activities—past events and closed tasks—related to an object. It includes activities for all contacts related to the object. ActivityHistory fields for phone calls are only available if your organization uses Salesforce CRM Call Center.

Supported Calls

`describeSObjects()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Fields

Field	Details
`AccountId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the related account, which is determined as follows: • The account associated with the `WhatId`, if it exists; or • The account associated with the `WhoId`, if it exists; otherwise • `null` For information on IDs, see ID Field Type.
`ActivityDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Indicates one of the following: • The due date of a task • The due date of an event if `IsAllDayEvent` is set to `true`

Field	Details
	This field has a time stamp that is always set to midnight in the Universal Time Coordinated (UTC) time zone. The time stamp doesn't represent the time of the activity; don't attempt to alter it to accommodate time zone differences. Label is `Date`.
`ActivityDateTime`	**Type** dateTime **Properties** Aggregate, Filter, Nillable, Sort **Description** Contains the event's due date if the `IsAllDayEvent` flag is set to `false`. The time portion of this field is always transferred in the Coordinated Universal Time (UTC) time zone. Translate the time portion to or from a local time zone for the user or the application, as appropriate. Label is **Due Date Time**. The value for this field and `StartDateTime` must match, or one of them must be `null`.
`ActivitySubtype`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Provides standard subtypes to facilitate creating and searching for specific activity subtypes. This field isn't updateable. `ActivitySubtype` values: • Task • Email • Call • Event • List Email
`ActivityType`	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** Represents one of the following values: `Call`, `Email`, `Meeting`, or `Other`. Label is `Type`. These are default values, and can be changed. `ActivityType` is the union of `TaskType` and `EventType`. If the same activity appears in both dynamic picklists, duplicate activities appear. `TaskType` and `EventType` can each have a `Call` type. Internally, they are distinct from each other.

Field	Details
AlternateDetailId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of a record the activity is related to which contains more details about the activity. For example, an activity can be related to an EmailMessage record.
CallDisposition	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Represents the result of a given call, for example, “we'll call back,” or “call unsuccessful.” Limit is 255 characters.
CallDurationInSeconds	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Duration of the call in seconds.
CallObject	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of a call center. Limit is 255 characters.
CallType	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of call being answered: Inbound, Internal, or Outbound.
ConnectionReceivedId	**Type** reference

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** Indicates the ID of the PartnerNetworkConnection that shared this record with your organization. This field is available only if your organization has enabled Salesforce to Salesforce and only in API versions 28.0 and later.
`ConnectionSentId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the PartnerNetworkConnection that your organization shared this record with. This field is available only if your organization has enabled Salesforce to Salesforce, and only in API versions 28.0 and later. The value is always `null`. You can use the PartnerNetworkRecordConnection object to forward records to connections.
`Description`	**Type** textarea **Properties** Nillable **Description** Contains a description of the event or task. Limit is 32 KB.
`Division`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** A logical segment of your organization's data. For example, if your company is organized into different business units, you could create a division for each business unit, such as “North America,” “Healthcare,” or “Consulting.” Available only if the organization has the Division permission enabled.
`DurationInMinutes`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Indicates the duration of the event or task.

Field	Details
EndDateTime	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates the end date and time of the event or task. Available in versions 27.0 and later. This field is optional, depending on the following: • If `IsAllDayEvent` is true, you can supply a value for either `DurationInMinutes` or `EndDateTime`. Supplying values in both fields is allowed if the values add up to the same amount of time. If both fields are `null`, the duration defaults to one day. • If `IsAllDayEvent` is false, a value must be supplied for either `DurationInMinutes` or `EndDateTime`. Supplying values in both fields is allowed if the values add up to the same amount of time.
IsAllDayEvent	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If the value of this field is set to `true`, then the activity is an event spanning a full day, and the `ActivityDate` defines the date of the event. If the value of this field is set to `false`, then the activity may be an event spanning less than a full day, or it may be a task. Label is `All-Day Event`.
IsClosed	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a task is closed; value is always `true`. This field is set indirectly by setting the `Status` field on the task—each picklist value has a corresponding `IsClosed` value. Label is `Closed`.
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the activity has been moved to the Recycle Bin (`true`) or not (`false`). Label is `Deleted`.

Field	Details
IsHighPriority	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates a high-priority task. This field is derived from the `Priority` field.
IsOnlineMeeting	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the activity represents an online meeting (`true`) or not (`false`). Note: This field is not available in API version 16.0 or later.
IsReminderSet	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a reminder is set for an activity (`true`) or not (`false`).
IsTask	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If the value of this field is set to `true`, then the activity is a task. If the value is set to `false`, then the activity is an event. Label is `Task`.
IsVisibleInSelfService	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If the value of this field is set to `true`, then the activity can be viewed in the self-service portal. Label is `Visible in Self-Service`.
Location	**Type** string

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** If the activity is an event, then this field contains the location of the event. If the activity is a task, then the value is `null`.
`OwnerId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the user or group who owns the activity.
`PrimaryAccountId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Contains the `AccountId` value from the activity record. Available in API versions 30.0 and later to organizations that use Shared Activities.
`PrimaryWhoId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Contains the `WhoId` value from the activity record. Available in API versions 30.0 and later to organizations that have enabled Shared Activities.
`Priority`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** Indicates the priority of a task, such as high, normal, or low.
`ReminderDateTime`	**Type** dateTime **Properties** Filter, Nillable, Sort

Field	Details
	Description Represents the time when the reminder is scheduled to fire, if `IsReminderSet` is set to `true`. If `IsReminderSet` is set to `false`, then the user may have deselected the reminder checkbox in the Salesforce user interface, or the reminder has already fired at the time indicated by the value.
`StartDateTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates the start date and time of the event. Available in versions 29.0 and later. If the event's `IsAllDayEvent` flag is set to true (indicating an all-day event), then the time stamp in `StartDateTime` is always set to midnight in the Coordinated Universal Time (UTC) time zone. Note: Don't attempt to alter the time stamp to account for any time zone differences. If the event's `IsAllDayEvent` flag is set to false, then you must translate the time portion of the time stamp in `StartDateTime` to or from a local time zone for the user or the application, as appropriate. The translation must be in the Coordinated Universal Time (UTC) time zone. If this field has a value, then `ActivityDate` and `ActivityDateTime` either must be null or must match the value of this field. If the activity is a task, `StartDateTime` is null
`Status`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** Indicates the current status of a task, such as in progress or complete. Each predefined status field sets a value for `IsClosed`. To obtain picklist values, query TaskStatus.
`Subject`	**Type** combobox **Properties** Filter, Nillable, Sort **Description** Contains the subject of the task or event.

Field	Details
`WhatId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The `WhatId` represents nonhuman objects such as accounts, opportunities, campaigns, cases, or custom objects. `WhatId`s are polymorphic. Polymorphic means a `WhatId` is equivalent to the ID of a related object. The label is `Related To ID`.
`WhoId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The WhoId represents a human such as a lead or a contact. WhoIds are polymorphic. Polymorphic means a WhoId is equivalent to a contact's ID or a lead's ID. The label is `Name ID`. If Shared Activities is enabled, the value of this field is the ID of the related lead or primary contact. If you add, update, or remove the WhoId field, you might encounter problems with triggers, workflows, and data validation rules that are associated with the record. The label is `Name ID`. If your organization uses Shared Activities, when you query activities in API version 30.0 or later, the returned value of the `WhoId` field matches the value in the queried object, not necessarily in the activity record itself. If Shared Activities is enabled, the value of this field is not populated and the field `PrimaryWhoId` should be queried instead.

Usage

Query activities that are related to an object

1. Optionally, issue a describe call against the object whose activities you wish to query, to get a suggestion of the correct SOQL to use.
2. Issue a SOQL relationship query with a main clause that references the object, and an inner clause that references the activity history; for example:

```
SELECT
   (SELECT ActivityDate, Description
    FROM ActivityHistories)
FROM Account
WHERE Name Like 'XYZ%'
```

The user interface enforces sharing rules, filtering out related-list items that a user doesn't have permission to see.

The following constraints on users who don't have the "View All Data" permission help prevent performance issues.

- In the main clause of the relationship query, you can reference only one record. For example, you can't filter on all records where the account name starts with "A." Instead, you must reference a single account record.

```
SELECT
   (SELECT ActivityDate, Description
    FROM ActivityHistories
    ORDER BY ActivityDate DESC NULLS LAST, LastModifiedDate DESC
    LIMIT 500)
FROM Account
WHERE Name = 'Acme'
LIMIT 1
```

- In the inner clause of the query, you can't use `WHERE`.
- In the inner clause of the query, you must specify a limit of 500 or fewer on the number of rows that are returned in the list.
- In the inner clause of the query, you must sort on `ActivityDate` in descending order and `LastModifiedDate` in descending order. You can optionally display nulls last. For example: `ORDER BY ActivityDate DESC NULLS LAST, LastModifiedDate DESC`.

SEE ALSO:

Task

ActivityMetric

Represents activities that were added to Salesforce automatically by Einstein Activity Capture and manually by users.

This object is available in API version 45.0.

Supported Calls

`create()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Unless otherwise noted, Einstein Activity Capture and Activity Metrics must be enabled.

Fields

Field	Details
`BaseId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, idLookup, Sort **Description** The ID of the record that the activities apply to.

Field	Details
BaseType	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The entity that corresponds to the BaseId
FirstCallDateTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Indicates the date when the first call was made. This field is available only to High Velocity Sales users. Einstein Activity Capture and Activity Metrics aren't required.
FirstEmailDateTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Indicates the date when the first email was sent. This field is available only to High Velocity Sales users. Einstein Activity Capture and Activity Metrics aren't required.
InactiveDays	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Indicates the number of days since the most recent activity was completed. This field is derived from the Last Activity Date field.
LastActivityDateLastModDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates when the LastActivityDateTime field was last modified.
LastActivityDateTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update

Field	Details
	Description Indicates the date when the most recent activity was completed.
LastCallDateLastModDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates when the LastCallDateTime field was last modified.
LastCallDateTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Indicates the date when the most recent call was made through Sales Dialer or Inbox.
LastEmailDateLastModDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates when the LastEmailDateTime field was last modified.
LastEmailDateTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Indicates the date when the most recent email was sent or received.
LastEventDateLastModDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates when the LastEventDateTime field was last modified.
LastEventDateTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update

Field	Details
	Description Indicates the date when the most recent event was completed.
`LastTaskDateLastModDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates when the LastTaskDateTime field was last modified.
`LastTaskDateTime`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Indicates the date when the last task was completed.
`NextActivityDateLastModDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates when the NextActivityDateTime field was last modified.
`NextActivityDateTime`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Indicates the date of the next scheduled task or event. Only open tasks in the future are included.

Usage

Use this object to see data about sales activities that were added to Salesforce manually and by Einstein Activity Capture. Activity Metric fields are derived from your activity data. For example, the Inactive Days field indicates the number of days since the most recent activity was completed. Create a trigger that notifies a user when there isn't any activity on an account for a certain amount of time.

AdditionalNumber

Represents an optional additional number for a call center. This additional number is visible in the call center's phone directory.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`CallCenterId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** System field that contains the ID of the user who created the call center associated with this additional number. If value is null, this additional number is displayed in every call center's phone directory.
`Description`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of the additional number, such as Conference Room B. Limit: 255 characters.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the additional number. Limit: 80 characters.
`Phone`	**Type** phone **Properties** Create, Filter, Nillable, Group, Sort, Update **Description** The phone number that corresponds to this additional number.

Usage

Create an additional number for a call center directory. Use this object if the number is not easily categorized as a User, Contact, Lead, Account, or the other object. Examples include phone queues or conference rooms.

Address

Represents a mailing, billing, or home address.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
`Address`	**Type** address **Properties** Filter, Nillable **Description** The full address.
`AddressType`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** Picklist of address types. The values are: • Mailing • Shipping • Billing • Home
`City`	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The address city.
`Country`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The address country.
`Description`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of the address.
`DrivingDirections`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Directions to the address.
`GeocodeAccuracy`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The level of accuracy of a location's geographical coordinates compared with its physical address. A geocoding service typically provides this value based on the address's latitude and longitude coordinates.
`Latitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update

Field Name	Details
	Description Used with `Longitude` to specify the precise geolocation of the address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
`LocationType`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Filter, Group, Sort, Update **Description** Picklist of location types. The available values are: • Warehouse (default) • Site • Van • Plant
`Longitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `Latitude` to specify the precise geolocation of the address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** An auto-generated number identifying the address.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** A lookup field to the parent location.
`PostalCode`	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The address postal code.
`State`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The address state.
`Street`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The address street.
`TimeZone`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Picklist of available time zones.

Usage

Important: "Address" in Salesforce can also refer to the Address compound field found on many standard objects. When referencing the Address object in your Apex code, always use `Schema.Address` instead of `Address` to prevent confusion with the standard Address compound field. If referencing both the address object and the Address field in the same snippet, you can differentiate between the two by using `System.Address` for the field and `Schema.Address` for the object.

AgentWork

Represents a work assignment that's been routed to an agent. This object is available in API version 32.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

To access this object, Omni-Channel must be enabled.

Fields

Field	Details
AcceptDateTime	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates when the work item was accepted.
ActiveTime	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The amount of time an agent actively worked on the work item. Tracks when the item is open and in focus in the agent’s console. Note: ActiveTime is tracked only for work that is routed using the tab-based capacity model.
AgentCapacityWhenDeclined	**Type** double **Properties** Filter, Nillable, Sort **Description** The agent’s capacity when declining work, either explicitly or through push timeout.
AssignedDateTime	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates when the work item was assigned to an agent,
CancelDateTime	**Type** dateTime **Properties** Filter, Nillable, Sort

Field	Details
	Description Indicates when the work item was canceled.
`CapacityModel`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Indicates the capacity model used to determine agent capacity. Valid values are StatusBased and TabBased. This field is available in API version 50.0 and later. Note: A work item consumes agent capacity only if it was first assigned to the agent by Omni-Channel using queues or skills.
`CapacityPercentage`	**Type** percent **Properties** Create, Filter, Nillable, Sort **Description** The percentage of an agent's capacity for work items that's consumed by a specific type of work item from this service channel. When an agent's combined work items reach 100%, the agent won't receive new work items until there is enough open capacity for more work. For example, if you give phone calls a capacity percentage of *100*, an agent on a call doesn't receive new work items until the call ends.
`CapacityWeight`	**Type** double **Properties** Create, Filter, Nillable, Sort **Description** The amount of an agent's capacity for work items that's consumed by a work item from this service channel. For example, if cases are assigned a capacity weight of *2*, an agent with a capacity of *6* can accept up to 3 cases before the agent is at capacity and can't receive new work items.
`CloseDateTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates when the work item was closed.

Field	Details
`DeclineDateTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date and time when the agent declined this record.
`DeclineReason`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The provided reason for why an agent declined the work request.
`HandleTime`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The amount of time an agent had the work item open. Calculated by `Close Time – Accepted Time`.
`IsOwnerChangeInitiated`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a work item owner change triggered the direct assignment of the work item to the agent. The default value is false. Status-Based Capacity Model has to be turned on to use this field. This field is available in API version 50.0 and later.
`IsPreferredUserRequired`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a work item should stay with the preferred user even when the user is not available. The default value is false. This field is available in API version 50.0 and later.
`IsStatusChangeInitiated`	**Type** boolean

Field	Details
	Properties Defaulted on create, Filter, Group, Sort **Description** Indicates whether a work item status change triggered the direct assignment of the work item to the agent. The default value is false. Status-Based Capacity Model has to be turned on to use this field. This field is available in API version 50.0 and later.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** An automatically generated ID number that identifies the record.
`OriginalGroupId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the queue that the work assignment was originally routed to.
`OriginalQueueId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the queue that the work assignment was originally routed to. Due to API changes, OriginalQueueId is no longer recommended. Use OriginalGroupId instead.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the owner of the `AgentWork`. This field is available in API version 50.0 and later.
`PendingServiceRoutingId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort

Field	Details
	Description ID of the PendingServiceRouting from which the AgentWork was created. This field is available in API version 50.0 and later.
`PreferredUserId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the preferred user to handle the work. This field is available in API v46.0 and later.
`PushTimeout`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of seconds set for push timeout. `0` is returned when push timeout isn't enabled. Available in API version 36.0 and later.
`PushTimeoutDateTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates when the push timeout event occurred. Available in API version 36.0 and later.
`RequestDateTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates when the work was requested.
`RoutingModel`	For internal use only.
`RoutingPriority`	For internal use only.
`RoutingType`	For internal use only.
`SecondaryRoutingPriority`	**Type** int **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description Indicates the secondary routing priority.
ServiceChannelId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the service channel that's associated with the work assignment.
ShouldSkipCapacityCheck	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Indicates whether to skip checking an agent's available capacity (`true`) or not (`false`) when an externally routed work item is created. This field is used when agents can simultaneously handle work from both Omni-Channel queues and queues using external routing. When `true`, the receiving agent can exceed their set capacity to accept the item, but they don't receive more Omni-Channel routed work. When `false`, the receiving agent can't exceed their set capacity and must have enough open capacity to accept the item.
SpeedToAnswer	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The amount of time between when the work was requested and when an agent accepted it.
Status	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The working status of the work item. Valid values are: • Assigned – The item is assigned to the agent but hasn't been opened. • Opened – The agent opened the item. • Unavailable – The item was assigned to the agent but the agent became unavailable (went offline or lost connection). • Declined – The item was assigned to the agent but the agent explicitly declined it.

Field	Details
	• DeclinedOnPushTimeout – The item was declined because push time-out is enabled and the item request timed out with the agent. • Closed – The item is closed. • Canceled – The item no longer needs to be routed. For example: a chat visitor cancels their Omni-Channel routed chat request before it reaches an agent. • Transferred–The item was transferred from an agent to another agent, queue, or skill.
`UserId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the user that the work item was assigned to.
`WorkItemId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the object that's routed to the agent through Omni-Channel.

Usage

`AgentWork` records can only be deleted if they have the status Closed, Declined, or Unavailable. They can't be deleted if their status is Assigned or Opened because they're active in Omni-Channel.

`AgentWork` records have the status Assigned when they're created. Once created, the record is automatically pushed to the assigned agent.

While the metadata for `AgentWork` indicates support for `upsert()` and `update()`, these calls aren't used with `AgentWork` because none of its fields can be updated.

Apex triggers are supported with `AgentWork`.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

AgentWorkOwnerSharingRule
Sharing rules are available for the object.

AgentWorkShare
Sharing is available for the object.

AgentWorkSkill

Represents a skill used to route a work assignment to an agent. AgentWorkSkill is used for reporting and represents the result of a routing decision. This object is available in API version 42.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`

Special Access Rules

To access this object, Omni-Channel must be enabled.

Fields

Field	Details
`AgentWorkId`	**Type** reference **Properties** Filter, Group, Sort **Description** The AgentWork object associated with this skill.
`IsAdditionalSkill`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** After a designated timeout period, a skill marked as additional is dropped from Omni-Channel routing. The case is then routed to the best-matched agent, even if the agent doesn't have all the skills. The default value is false. Available in API version 48.0 and later.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** An automatically generated ID number that identifies the record.
`SkillId`	**Type** reference **Properties** Filter, Group, Sort

Field	Details
	Description The skill that is required or additional.
`SkillLevel`	**Type** double **Properties** Filter, Sort **Description** The level of the required or additional skill. Skill levels can range from 1 to 10. Depending on your business needs, you might want the skill level to reflect years of experience, certification levels, or license classes.
`SkillPriority`	**Type** int **Properties** Aggregatable, Filter, Group, Nillable, Sort **Description** For additional skills, specifies the order in which skills are dropped if after the specified timeout no agent with that skill is available. Higher priority-value skills are dropped first. Lower priority-value skills, for example 0, are dropped last. Skills with the same priority value are dropped as a group. You can set skill priority using attribute setup for skills-based routing or Apex code.
`WasDropped`	**Type** boolean **Properties** Filter, Group, Sort **Description** For skills marked as additional, indicates if the skill was dropped from Omni-Channel routing because an agent with this skill was not available. The default value is false. Available in API version 48.0 and later.

AIApplication

Represents an AI application such as Einstein Prediction Builder. This object is available in API version 50.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
DeveloperName	**Type** string **Properties** Filter, Group, Sort **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization.
Language	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language of the application. Possible values are: • da—Danish • de—German • en_US—English • es—Spanish • es_MX—Spanish (Mexico) • fi—Finnish • fr—French • it—Italian • ja—Japanese • ko—Korean • nl_NL—Dutch • no—Norwegian • pt_BR—Portuguese (Brazil) • ru—Russian • sv—Swedish • th—Thai • zh_CN—Chinese (Simplified) • zh_TW—Chinese (Traditional)

Field	Details
MasterLabel	**Type** string **Properties** Filter, Group, Sort **Description** Label that identifies the AI application throughout the Salesforce user interface.
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Specifies the namespace of the application, if installed with a managed package.
Status	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Status of the AI application. Possible values are: • Disabled • Enabled • Migrated
Type	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of application. Possible values are: • PredictionBuilder

AIApplicationConfig

Additional prediction information related to an AI application. This object is available in API version 50.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
DeveloperName	**Type** string **Properties** Filter, Group, Sort **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization.
Language	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language of the application. Possible values are: • da—Danish • de—German • en_US—English • es—Spanish • es_MX—Spanish (Mexico) • fi—Finnish • fr—French • it—Italian • ja—Japanese • ko—Korean • nl_NL—Dutch • no—Norwegian • pt_BR—Portuguese (Brazil) • ru—Russian • sv—Swedish • th—Thai • zh_CN—Chinese (Simplified) • zh_TW—Chinese (Traditional)

Field	Details
MasterLabel	**Type** string **Properties** Filter, Group, Sort **Description** Label that identifies the AI application throughout the Salesforce user interface.
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Specifies the namespace of the application config, if installed with a managed package.

AIInsightAction

Represents an Einstein prediction insight action. This object is available in API version 47.0 and later.

An Einstein insight is created every time an Einstein feature, such as Prediction Builder or Case Classification, makes a prediction. An insight is represented by a root AIRecordInsight and the following child objects: AIInsightAction, AIInsightFeedback, AIInsightReason, and AIInsightValue.

AIInsightAction is a one-to-many child of AIRecordInsight. AIInsightAction contains information about predicted actions for this particular insight. AIInsightAction has one or more AIInsightValue children which contain predicted values for the action. For example, an AIInsightAction could represent a quick action, and have a child AIInsightValue with the recommended value used by the quick action.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Prediction insight objects are only available in orgs that have Einstein features, such as Prediction Builder or Case Classification, enabled.

Fields

Field	Details
ActionId	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The unique ID of the associated action, such as the ID of a Macro.
`ActionName`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The ID of the action. For example, a value of "Case.SendEmail" indicates a send email quick action on Case.
`AiRecordInsightId`	**Type** reference **Properties** Filter, Group, Sort **Description** The unique ID of the associated AIRecordInsight.
`Confidence`	**Type** double **Properties** Filter, Nillable, Sort **Description** Relative confidence strength of the generated prediction insight. Higher values (near 1.0) indicate stronger confidence.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name of the AIInsightAction.
`Type`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of action. Possible values are: • `InvocableAction`—Invocable Action • `Macro`—Macro

Field	Details
	• `QuickAction`—Quick action. • `StandardAction`—Standard Action. An example standard action would be to update a record.

Usage

When an Einstein feature makes a prediction and saves the results, the following events happen in a single atomic operation:

- An AIRecordInsight record is created and populated with information about the prediction insight. AIInsightAction, AIInsightReason, and AIInsightValue records are also created and made children of the AIRecordInsight record.
- If the Einstein feature uses AI prediction fields, prediction result values are written to the target AI prediction field.
- An AIPredictionEvent platform event is created, and any subscriber to AIPredictionEvent is notified.

When Einstein writes prediction results back to AI prediction fields, record save custom logic, such as Apex triggers, workflow rules, and assignment rules, aren't run. To add custom logic based on Einstein prediction results, use a platform event subscriber, such as Process Builder, to get notifications for AIPredictionEvents that contain references to Einstein insight objects.

Custom fields can't be added to Einstein insight objects.

Einstein insights contain information about target fields and predicted value. Be aware that your org may have created Einstein predictions that are associated with target fields with field-level security restrictions. Use data access features of Salesforce, such as user profiles and permission sets, if you need to control how users access Einstein insights records.

AIInsightFeedback

Represents an Einstein prediction insight feedback. This object is available in API version 47.0 and later.

An Einstein insight is created every time an Einstein feature, such as Prediction Builder or Case Classification, makes a prediction. An insight is represented by a root AIRecordInsight and the following child objects: AIInsightAction, AIInsightFeedback, AIInsightReason, and AIInsightValue.

AIInsightFeedback is a one-to-many child of AIRecordInsight. AIInsightFeedback contains information about explicit and implicit feedback collected from users for a particular insight.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Prediction insight objects are only available in orgs that have Einstein features, such as Prediction Builder or Case Classification, enabled.

Fields

Field	Details
`ActualValue`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The raw feedback value. This field is null when no recommendation is selected.
`AiFeedback`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The feedback user sentiment. Possible values are: • `Negative`—Negative feedback • `Neutral`—Neutral feedback • `Positive`—Positive feedback
`AiInsightFeedbackType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The nature of the feedback. Possible values are: • `Explicit`—Explicit feedback. For example, a user applies and saves an Einstein recommendation on a case. • `Implicit`—Implicit feedback. For example, a user edits or updates a case field without viewing or applying field recommendations from Einstein.
`AiRecordInsightId`	**Type** reference **Properties** Filter, Group, Sort **Description** The unique ID of the associated AIRecordInsight.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort

Field	Details
	Description The name of the AIInsightFeedback.
`Rank`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The feedback score.
`ValueId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The unique ID of the associated AIInsightValue.

Usage

Salesforce creates AIInsightFeedback records based on user responses to predictions after the prediction has been created. User feedback, such as a thumbs up/down response or accepting a recommended value, results in the creation of a feedback record in which the feedback type is explicit. An implicit feedback record is created when Einstein makes a recommendation but the field is updated in another way, for example, by a process. Once the AIInsightFeedback record has been created, it's immutable.

Custom fields can't be added to Einstein insight objects.

AIInsightReason

Represents an Einstein prediction insight reason. This object is available in API version 47.0 and later.

An Einstein insight is created every time an Einstein feature, such as Prediction Builder or Case Classification, makes a prediction. An insight is represented by a root AIRecordInsight and the following child objects: AIInsightAction, AIInsightFeedback, AIInsightReason, and AIInsightValue.

AIInsightReason is a one-to-many child of AIInsightValue. AIInsightReason contains details about how Einstein predicted an insight value.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Prediction insight objects are only available in orgs that have Einstein features, such as Prediction Builder or Case Classification, enabled.

Fields

Field	Details
AiInsightValueId	**Type** reference **Properties** Filter, Group, Sort **Description** The unique ID of the associated AIInsightValue.
Contribution	**Type** double **Properties** Filter, Nillable, Sort **Description** The contribution weight for this insight reason.
FeatureType	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of the feature, such as BOOL.
FeatureValue	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The value of the feature, such as TRUE or FALSE.
FieldName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the field the insight uses for its evaluation.
FieldValue	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The value for the field the insight uses for its evaluation.
`Intensity`	**Type** double **Properties** Filter, Nillable, Sort **Description** The intensity weight for this insight reason.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name of the AIInsightReason.
`Operator`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The logical operator the insight uses to compare the field value with the expression value. For example, if the prediction evaluates whether the fieldValue for the field `bonus__c` is greater than $5,000, the logical operator is `greater than`.
`Variance`	**Type** double **Properties** Filter, Nillable, Sort **Description** The variance weight for this insight reason.

Usage

When an Einstein feature makes a prediction and saves the results, the following events happen in a single atomic operation:

- An AIRecordInsight record is created and populated with information about the prediction insight. AIInsightAction, AIInsightReason, and AIInsightValue records are also created and made children of the AIRecordInsight record.
- If the Einstein feature uses AI prediction fields, prediction result values are written to the target AI prediction field.
- An AIPredictionEvent platform event is created, and any subscriber to AIPredictionEvent is notified.

When Einstein writes prediction results back to AI prediction fields, record save custom logic, such as Apex triggers, workflow rules, and assignment rules, aren't run. To add custom logic based on Einstein prediction results, use a platform event subscriber, such as Process Builder, to get notifications for AIPredictionEvents that contain references to Einstein insight objects.

Custom fields can't be added to Einstein insight objects.

Einstein insights contain information about target fields and predicted value. Be aware that your org may have created Einstein predictions that are associated with target fields with field-level security restrictions. Use data access features of Salesforce, such as user profiles and permission sets, if you need to control how users access Einstein insights records.

AIInsightValue

Represents an Einstein prediction insight value. This object is available in API version 47.0 and later.

An Einstein insight is created every time an Einstein feature, such as Prediction Builder or Case Classification, makes a prediction. An insight is represented by a root AIRecordInsight and the following child objects: AIInsightAction, AIInsightFeedback, AIInsightReason, and AIInsightValue.

AIInsightValue is a one-to-many child of AIRecordInsight. AIInsightValue represents a predicted value of a predicted insight.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Prediction insight objects are only available in orgs that have Einstein features, such as Prediction Builder or Case Classification, enabled.

Fields

Field	Details
`AiInsightActionId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The unique ID of the associated AIInsightAction.
`AiRecordInsightId`	**Type** reference **Properties** Filter, Group, Sort **Description** The unique ID of the associated AIRecordInsight.

Field	Details
Confidence	**Type** double **Properties** Filter, Nillable, Sort **Description** Relative confidence strength of the generated prediction insight. Higher values (near 1.0) indicate stronger confidence.
Field	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The name of the target field Einstein is making predictions for, such as “AnnualRevenue”.
FieldValueLowerBound	**Type** textarea **Properties** Nillable **Description** The lower bound value.
FieldValueUpperBound	**Type** textarea **Properties** Nillable **Description** The upper bound value.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name of the AIInsightValue.
SobjectLookupValueId	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The unique ID of the value object, if this insight value references an object.
`SobjectType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of the value object, such as Account or Case, if this insight value references an object.
`Value`	**Type** textarea **Properties** Nillable **Description** The prediction result insight value.
`ValueType`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The data type of the prediction result insight value. Possible values are: • `Boolean`—Boolean • `Currency`—Currency • `DateTime`—DateTime • `Enum`—Enum • `Lookup`—Lookup • `Number`—Number • `String`—String

Usage

When an Einstein feature makes a prediction and saves the results, the following events happen in a single atomic operation:

- An AIRecordInsight record is created and populated with information about the prediction insight. AIInsightAction, AIInsightReason, and AIInsightValue records are also created and made children of the AIRecordInsight record.
- If the Einstein feature uses AI prediction fields, prediction result values are written to the target AI prediction field.
- An AIPredictionEvent platform event is created, and any subscriber to AIPredictionEvent is notified.

When Einstein writes prediction results back to AI prediction fields, record save custom logic, such as Apex triggers, workflow rules, and assignment rules, aren't run. To add custom logic based on Einstein prediction results, use a platform event subscriber, such as Process Builder, to get notifications for AIPredictionEvents that contain references to Einstein insight objects.

Custom fields can't be added to Einstein insight objects.

Einstein insights contain information about target fields and predicted value. Be aware that your org may have created Einstein predictions that are associated with target fields with field-level security restrictions. Use data access features of Salesforce, such as user profiles and permission sets, if you need to control how users access Einstein insights records.

AIRecordInsight

Represents an Einstein prediction insight. This object is available in API version 47.0 and later.

An Einstein insight is created every time an Einstein feature, such as Prediction Builder or Case Classification, makes a prediction. An insight is represented by a root AIRecordInsight and the following child objects: AIInsightAction, AIInsightFeedback, AIInsightReason, and AIInsightValue.

AIRecordInsight contains information on the Einstein prediction, the AI prediction field where results were written to, and other details such as the type of prediction.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`

Special Access Rules

Prediction insight objects are only available in orgs that have Einstein features, such as Prediction Builder or Case Classification, enabled.

Fields

Field	Details
`AiApplicationId`	**Type** reference **Properties** Filter, Group, Sort **Description** The unique ID of the AiApplication that generated this prediction.
`Confidence`	**Type** double **Properties** Filter, Nillable, Sort **Description** Relative confidence strength of the generated prediction insight, from 0.0 to 1.0. Higher values (near 1.0) indicate stronger confidence.

Field	Details
MlPredictionDefinitionId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The unique ID of the associated MLPredictionDefinition.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name of the AIRecordInsight.
PredictionField	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The label of the field that Einstein is making predictions for, such as “Case.IsEscalated”.
RunGuid	**Type** string **Properties** Filter, Group, Sort **Description** A unique identifier for the Einstein process that made the prediction.
RunStartTime	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time the Einstein prediction process was started.
Status	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The status of this insight. Possible values are:

Field	Details
	• `Defunct`—The insight has been consumed by the Einstein feature that owns the prediction. For example, Case Classification marks an insight as defunct if a predicted recommendation was presented to a user and the user either accepted or ignored the recommendation. This behavior ensures that the same recommendation isn't presented multiple times to the user. • `New`—The insight hasn't been consumed by the Einstein feature.
`TargetField`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The field to which prediction results are written. Case Classification doesn't use this field.
`TargetId`	**Type** reference **Properties** Filter, Group, Sort **Description** The unique ID of the record Einstein is making predictions for.
`TargetSobjectType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of the target object, such as Account or Case.
`Type`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of insight. Possible values are: • `Action`—An insight that indicates a suggested action, such as sending an email. • `Lookup`—An insight that indicates a related value not directly related to the target object and field. • `MultiValue`—An insight with multiple values, such as a multi-class classification. • `SimilarRecord`—An insight that indicates similar or duplicate records. • `SingleValue`—A single value insight, such as a regression number or a score.

Field	Details
`ValidUntil`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The day and time this insight is valid until. After this day and time, the insight might no longer be valid due to new prediction results from new or changed data. If this field is `null`, this insight never expires.

Usage

When an Einstein feature makes a prediction and saves the results, the following events happen in a single atomic operation:

- An AIRecordInsight record is created and populated with information about the prediction insight. AIInsightAction, AIInsightReason, and AIInsightValue records are also created and made children of the AIRecordInsight record.
- If the Einstein feature uses AI prediction fields, prediction result values are written to the target AI prediction field.
- An AIPredictionEvent platform event is created, and any subscriber to AIPredictionEvent is notified.

When Einstein writes prediction results back to AI prediction fields, record save custom logic, such as Apex triggers, workflow rules, and assignment rules, aren't run. To add custom logic based on Einstein prediction results, use a platform event subscriber, such as Process Builder, to get notifications for AIPredictionEvents that contain references to Einstein insight objects.

Custom fields can't be added to Einstein insight objects.

Einstein insights contain information about target fields and predicted value. Be aware that your org may have created Einstein predictions that are associated with target fields with field-level security restrictions. Use data access features of Salesforce, such as user profiles and permission sets, if you need to control how users access Einstein insights records.

Considerations for Case Classification

To generate reports about how well Einstein Case Classification predictions are working, use the root AIRecordInsight object and its child objects, AIInsightFeedback and AIInsightValue. For example, you can determine how many cases received predictions or how often agents accepted or rejected them.

- To determine how many cases received recommendations, the AIRecordInsight table identifies the case and contains a row for each field and each recommendation. In AIRecordInsight, the TargetId field contains the case ID. The PredictionField indicates which case field is being predicted. Each field value recommendation is contained in a separate AIInsightValue object with AIRecordInsight as the parent. For a picklist field, Einstein creates AIInsightValue objects with up to 10 field value recommendations. However, just the top three predictions appear to agents in the Einstein Field Recommendations component.
- To learn whether agents acted on any of the top three predictions, use the AIInsightFeedback object. When an agent updates fields after viewing Einstein's recommendations, or when Einstein applies a recommendation automatically, the object's AiInsightFeedbackType field contains Explicit. If the agent updates fields without viewing the predictions, such as on the case details tab, AiInsightFeedbackType is set to Implicit. When the agent applies the recommended value, the object's AiFeedback field is set to Positive; if the agent applies a different value, AiFeedback is Negative.

AllowedEmailDomain

Represents an allowed email domain for users in your organization. You can define an allowlist to restrict the email domains allowed in a user's `Email` field. This object is available in API version 29.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

You must have the "Manage Internal Users" user permission to use this object.

Note: If you don't see this object, contact your Salesforce representative to enable it.

Fields

Field	Details
`Domain`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** An allowed email domain for users.

AlternativePaymentMethod

Represents a payment method that doesn't have a defined Commerce Orders entity such as CardPaymentMethod on page 577 or DigitalWallet on page 1008. Common examples of alternative payment methods for Commerce Orders include CashOnDeliver, Klarna, and Direct Debit. `AlternativePaymentMethod` functions the same as any other type of payment method for processing transactions in the payment gateway. This object is available in API version 51.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

To access Commerce Payments entities, your org must have a Salesforce Order Management license. Commerce Payments entities are available only in Lightning Experience.

Fields

Field	Details
AccountId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The account for the alternative payment method.
AlternativePaymentMethodNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** Salesforce ID number for the alternative payment method.
AuditEmail	**Type** email **Properties** Create, Filter, Group, Nillable, Sort, Update **Description**
Comments	**Type** textarea **Properties** Create, Nillable, Update **Description** Users can add comments to provide additional details about a record. Maximum of 1000 characters.
CompanyName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Company name for this payment method. Part of the payment method's address.
Email	**Type** email **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description Email address of the payment method holder.
GatewayToken	**Type** encryptedstring **Properties** Create, Nillable, Update **Description** Tokenized form of the alternative payment method, returned by the gateway. Stored as encrypted text.
GatewayTokenDetails	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Unique tokenized ID generated by the payment gateway when this payment method first interacts with the gateway. Used to identify the payment method during future transactions.
IpAddress	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** IP address for the payment method owner.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (LastReferencedDate) but not viewed it.

Field	Details
MacAddress	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Mac Address of the payment method holder.
NickName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** User-defined nickname for this pamyent method.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The user who owns the alternative payment method.
PaymentGatewayId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the payment gateway entity used to handle transactions from this payment method.
PaymentMethodAddress	**Type** address **Properties** Filter, Nillable **Description** User address column type. First name and last name are listed as separate fields.
PaymentMethodCity	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Part of the address for this payment method.

Field	Details
PaymentMethodCountry	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Part of the address for this payment method.
PaymentMethodGeocodeAccuracy	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Part of the address for this payment method.
PaymentMethodLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Part of the address for this payment method.
PaymentMethodLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Part of the address for this payment method.
PaymentMethodPostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Part of the address for this payment method.
PaymentMethodState	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Part of the address for this payment method.

Field	Details
PaymentMethodStreet	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Part of the address for this payment method.
Phone	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Phone number of the payment method's owner.
ProcessingMode	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** Shows whether the payment method was created in Salesforce or externally. Required. Possible values are: • `External`: Select this value if you create the alternative payment method record through any method other than Commerce Payments Connect API. • `Salesforce`: Select this value if you use Commerce Payments Connect API to create the alternative payment method record.
Status	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The state of the payment method. Required. Possible values are: • `Active`: The Payments Platform can use the alternative payment method to make payments. Active alternative payment methods can't be deleted. • `Canceled`: The Payments Platform can no longer use the payment method to make payments. A value of `Canceled` can't be changed back to `Active` or `Inactive` • `InActive`: The Payment Platform currently can't use the payment method to make payments. Admins can change this value to `Active` or `Canceled` when needed.

Announcement

Represents a Chatter group announcement. This object is available in API version 30.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`ExpirationDate`	**Type** dateTime **Properties** Create, Filter, Sort, Update **Description** Required. The date on which the announcement expires. Announcements display on the group UI until 11:59 p.m. local time on the selected date.
`FeedItemId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. The ID of the FeedItem that contains the content of the announcement. Announcements are stored as text posts.
`ParentId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the parent CollaborationGroup that the announcement belongs to. An announcement can belong only to a single Chatter group.
`SendEmails`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field Name	Details
	Description Set to `true` to email all group members when an announcement is posted to the group. The default is `false`. This requires the user to have the "Send announcement on email" permission. This field is available in API version 36.0 and later. Note: This field is currently available to select customers through a pilot program. To be nominated to join this pilot program, contact Salesforce. Additional terms and conditions may apply to participate in the pilot program. Please note that pilot programs are subject to change, and as such, we cannot guarantee acceptance into this pilot program or a particular time frame in which this feature can be enabled. Any unreleased services or features referenced in this document, press releases, or public statements are not currently available and may not be delivered on time or at all. Customers who purchase our services should make their purchase decisions based upon features that are currently available.

Usage

Group owners, managers, and users with the "Modify All Data" permission can use the Announcement object to create, edit, and delete group announcements. Creating a group announcement is a three-step process.

1. Use the FeedItem object to create a text post with the announcement's content. Use the CollaborationGroup record you want to post the announcement to as the parent of this feed item.
2. Next, use the feed item ID and an expiration date to create the announcement record.
3. Finally, update the `AnnouncementId` field in the CollaborationGroup record with the ID of the announcement you created.

To delete the group announcement, simply delete the `AnnouncementId` value in the CollaborationGroup record. To restore a group announcement, update the `AnnouncementId` field for a group with the announcement's ID. The expiration date for the announcement should be in the future and the feed item used to create the announcement should be parented by the same group.

ApexClass

Represents an Apex class.

Note: Although Apex classes and triggers have the Create and Update field properties, a runtime exception occurs if you try to create or update them using the API. Instead, use the Ant Migration Tool, the Salesforce user interface, or the Salesforce Extensions for Visual Studio Code to create or update Apex classes or triggers.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()update()`, `upsert()`

Fields

Field	Details
ApiVersion	**Type** double **Properties** Create, Filter, Sort, Update **Description** The API version for this class. Every class has an API version specified at creation.
Body	**Type** textarea **Properties** Create, Nillable, Update **Description** The Apex class definition. Limit: 1 million characters.
BodyCrc	**Type** double **Properties** Create, Defaulted on create, Filter, Nillable, Sort, Update **Description** The CRC (cyclic redundancy check) of the class or trigger file.
IsValid	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether any dependent metadata has changed since the class was last compiled (`true`) or not (`false`). The default value is `false`.
LengthWithoutComments	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** Length of the class without comments.
Name	**Type** string

Field	Details
	Properties Create, Filter, Group, idLookup, Sort, Update **Description** Name of the class. Limit: 255 characters
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
`Status`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The current status of the Apex class. The following string values are valid: • `Active`—The class is active. • `Deleted`—The class is marked for deletion. This is useful for managed packages, because it allows a class to be deleted when a managed package is updated. • `Inactive`—This option is unused and is only supported for ApexTrigger. For more information, see the Metadata API Developer Guide.

SEE ALSO:

ApexTrigger

Developer Guide: Apex Developer Guide

ApexComponent

Represents a definition for a custom component that can be used in a Visualforce page alongside standard components such as `<apex:relatedList>` and `<apex:dataTable>`.

Represents a definition for a custom component that can be used in a Visualforce page alongside standard components such as `<apex:relatedList>` and `<apex:dataTable>`. For information, see the *Visualforce Developers Guide*.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Fields

Field	Details
`ApiVersion`	**Type** double **Properties** Create, Filter, Sort, Update **Description** The API version for this custom component. Every custom component has an API version specified at creation. If the API version is less than 15.0 and `ApiVersion` is not specified, `ApiVersion` defaults to 15.0.
`ControllerKey`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The identifier for the controller associated with this custom component: • If the `ControllerType` parameter is set to `Standard` or `StandardSet`, this value is the name of the sObject that defines the controller. • If the `ControllerType` parameter is set to `Custom`, this value is the name of the Apex class that defines the controller.
`ControllerType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of controller associated with this Visualforce custom component. Possible values include:

Field	Details
	• `Not Specified`, for custom components defined without a value for the `controller` attribute on the `<apex:component>` tag • `Standard`, a value that can't be used with custom components or errors may occur • `StandardSet`, a value that can't be used with custom components or errors may occur • `Custom`, for components that have a value for the `controller` attribute on the `<apex:component>` tag
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the Visualforce custom component.
`Markup`	**Type** textarea **Properties** Create, Update **Description** The Visualforce markup, HTML, Javascript, and any other Web-enabled code that defines the content of the custom component.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The text used to identify the Visualforce custom component in the Setup area of Salesforce. The Label for this field is **Label**.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. Name of this Visualforce custom component.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.

Usage

Use custom components to encapsulate a common design pattern and then reuse that pattern several times in one or more Visualforce pages. All users who can view Visualforce pages can view custom components, but the "Customize Application" permission is required to create or update custom components.

SEE ALSO:

ApexPage

StaticResource

Developer Guide: Visualforce Developer Guide

ApexLog

Represents a debug log containing information about a transaction, including information about Apex, Visualforce, and workflow and validation rules. This object is available in API version 19.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`Application`	**Type** string

Field	Details
	Properties Filter, Group, Sort **Description** This value depends on the client type that triggered the log. • For API clients, this value is the client ID. • For browser clients, this value is `Browser`.
`DurationMilliseconds`	**Type** int **Properties** Filter, Group, Sort **Description** Duration of the transaction in milliseconds.
`Location`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies the location of the origin of the log. Values are: • `Monitoring`—Log is generated as part of debug log monitoring. These types of logs are maintained for seven days or until a user deletes them. • `SystemLog`—Log is generated from the Developer Console. These types of logs are maintained for 24 hours or until the user clears them.
`LogLength`	**Type** int **Properties** Filter, Group, Sort **Description** Length of the log in bytes.
`LogUserId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the user whose actions triggered the debug log.
`Operation`	**Type** string

Field	Details
	Properties Filter, Group, Sort **Description** Name of the operation that triggered the debug log, such as `APEXSOAP`, `Apex Sharing Recalculation`, and so on.
`Request`	**Type** string **Properties** Filter, Group, Sort **Description** Request type. Values are: • `API`—Request came from the API • `Application`—Request came from the Salesforce user interface
`RequestIdentifier`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The unique identifier of the request that triggered the debug log. Use this request identifier to correlate multiple debug logs triggered by the same request.
`StartTime`	**Type** dateTime **Properties** Filter, Sort **Description** Start time of the transaction.
`Status`	**Type** string **Properties** Filter, Group, Sort **Description** Status of the transaction. This value is either `Success`, or the text of an unhandled Apex exception.

Usage

You can read information about this object, as well as delete it, but you can't update or insert it.

SEE ALSO:

ApexClass

ApexTrigger

Developer Guide: Apex Developer Guide

ApexPage

Represents a single Visualforce page.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Fields

Field	Details
`ApiVersion`	**Type** double **Properties** Create, Filter, Sort, Update **Description** The API version for this page. Every page has an API version specified at creation. If the API version is less than 15.0 and `ApiVersion` is not specified, `ApiVersion` defaults to 15.0.
`ControllerKey`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The identifier for the controller associated with this page: • If the `ControllerType` parameter is set to `Standard` or `StandardSet`, this value is the name of the sObject that defines the controller. • If the `ControllerType` parameter is set to `Custom`, this value is the name of the Apex class that defines the controller.

Field	Details
ControllerType	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of controller associated with this Visualforce page. Possible values include: • `Not Specified`, for pages defined with neither a `standardController` nor a `controller` attribute on the `<apex:page>` tag • `Standard`, for pages defined with the `standardController` attribute on the `<apex:page>` tag • `StandardSet`, for pages defined using the `standardController` and `recordSetVar` attribute on the `<apex:page>` tag • `Custom`, for pages defined with the `controller` attribute on the `<apex:page>` tag
Description	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the Visualforce page.
IsAvailableInTouch	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates if Visualforce tabs associated with the Visualforce page can be used in the Salesforce mobile app (`true`) or not (`false`). (Use of this field for Salesforce Touch is deprecated.) This field is available in API version 27.0 and later. Standard object tabs that are overridden with a Visualforce page aren’t supported in the Salesforce mobile app, even if you set this field for the page. The default Salesforce app page for the object is displayed instead of the Visualforce page.
IsConfirmationTokenRequired	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether `GET` requests for the page require a CSRF confirmation token (`true`) or not (`false`). This field is available in API version 28.0 and later.

Field	Details
	If you change this field's value from `false` to `true`, links to the page require a CSRF token to be added to them, or the page will be inaccessible.
`Markup`	**Type** textarea **Properties** Create, Update **Description** The Visualforce markup, HTML, Javascript, and any other Web-enabled code that defines the content of the page.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The text used to identify the Visualforce page in the Setup area of Salesforce. The Label is **Label**.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. Name of this Visualforce page.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer.

Field	Details
	• In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.

Usage

Use Visualforce pages to add custom content that extends the base Salesforce application functionality. All users in Visualforce-enabled organizations can view Visualforce pages, but the "Customize Application" permission is required to create or update them.

SEE ALSO:

ApexComponent

StaticResource

Developer Guide: Visualforce Developer Guide

ApexPageInfo

Represents metadata about a single Visualforce page. This object is available in API version 48.0 and later.

Supported Calls

`describeSObjects()`, `query()`

Special Access Rules

As of Summer '20 and later, this object can only be accessed by users who can view a particular Visualforce page, and users with the View Setup and Configuration permission.

Fields

Field	Details
`ApexPageId`	**Type** string **Properties** Filter, Group, Sort **Description** ID for the Visualforce page.
`ApiVersion`	**Type** double

Field	Details
	Properties Filter, Sort **Description** The API version for the page. Every page has an API version specified at creation. If the API version is less than `15.0` and `ApiVersion` is not specified, `ApiVersion` defaults to `15.0`.
`Description`	**Type** textarea **Properties** Filter, Nillable, Sort **Description** Description of the Visualforce page.
`DurableId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** For internal use only.
`IsAvailableInTouch`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates if Visualforce tabs associated with the Visualforce page can be used in the Salesforce app (`true`) or not (`false`). The default value is `false`.
`IsShowHeader`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The `showHeader` value for the Visualforce page. This will be "unknown" if the Visualforce page uses an expression to compute `showHeader`. The default value is `true`.
`MasterLabel`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The text used to identify the Visualforce page in the Setup area of Salesforce.
`Name`	**Type** string **Properties** Filter, Group, Sort **Description** Developer name of the Visualforce page.
`NameSpacePrefix`	**Type** string **Properties** Filter, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the `namespacePrefix__componentName` notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, the namespace prefix is set to the namespace prefix of the org for all objects that support it. Note: If an object is in an installed managed package, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In non-Developer Edition orgs, `NamespacePrefix` is only set for objects that are part of an installed managed package. Objects outside of an installed managed package do not have a namespace prefix.

Usage

Use `ApexPageInfo` to query limited metadata about Visualforce pages. Some of this metadata corresponds to settings for a Visualforce page available in Visualforce Pages. To access Visualforce Pages, from *Setup*, in the *Quick Find* box, enter *Custom Code*. Then, select Visualforce Pages. Other values are only available via API. Use `ApexPageInfo` in Visualforce pages to add custom content that extends the base Salesforce application functionality.

Users can only query `ApexPageInfo` records if they can display the associated Visualforce page, or if they have the View Setup & Configuration permission. Allow users to view Visualforce pages by modifying their user profile or assigning permission sets.

ApexTestQueueItem

Represents a single Apex class in the Apex job queue. This object is available in API version 23.0 and later.

This object is available in API version 23.0 and later.

Supported Calls

`create()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

The `enableApexTestReqViewSetup` field on the ApexSettings metadata type controls the activation of the critical update "Require View Setup permission to access Apex test data". In API version 49.0 and later, when the field is set to `true`, users must have the View Setup and Configuration permission to access this object.

Fields

Field Name	Description
`ApexClassId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The Apex class whose tests are to be executed.
`ExtendedStatus`	**Type** string **Properties** Filter, Nillable, Sort **Description** The pass rate of the test run. For example: "(4/6)". This means that four out of a total of six tests passed. If the class fails to execute, this field contains the cause of the failure.
`ParentJobId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Points to the AsyncApexJob that represents the entire test run. If you insert multiple Apex test queue items in a single bulk operation, the queue items share the same parent job. This means that a test run can consist of the execution of the tests of several classes if all the test queue items are inserted in the same bulk operation.

Field Name	Description
ShouldSkipCodeCoverage	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether to opt out of collecting code coverage information during Apex test runs. Available in API version 43.0 and later.
Status	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort, Update **Description** The status of the job. Valid values are: • Holding[1] • Queued • Preparing • Processing • Aborted • Completed • Failed [1] This status applies to batch jobs in the Apex flex queue.
TestRunResultId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the associated ApexTestRunResult object.

Usage

Insert an `ApexTestQueueItem` object to place its corresponding Apex class in the Apex job queue for execution. The Apex job executes the test methods in the class.

To abort a class that is in the Apex job queue, perform an update operation on the ApexTestQueueItem object and set its `Status` field to *`Aborted`*.

If you insert multiple Apex test queue items in a single bulk operation, the queue items share the same parent job. This means that a test run can consist of the execution of the tests of several classes if all the test queue items are inserted in the same bulk operation.

ApexTestResult

Represents the result of an Apex test method execution. This object is available in API version 23.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

The `enableApexTestReqViewSetup` field on the ApexSettings metadata type controls the activation of the critical update "Require View Setup permission to access Apex test data". In API version 49.0 and later, when the field is set to `true`, users must have the View Setup and Configuration permission to access this object.

Fields

Field Name	Details
`ApexClassId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The Apex class whose test methods were executed.
`ApexLogId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Points to the ApexLog for this test method execution if debug logging is enabled; otherwise, `null`.
`ApexTestRunResultId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the ApexTestRunResult that represents the entire test run.
`AsyncApexJobId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** Points to the AsyncApexJob that represents the entire test run. This field points to the same object as `ApexTestQueueItem.ParentJobId`.
`Message`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** The exception error message if a test failure occurs; otherwise, `null`.
`MethodName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The test method name.
`Outcome`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The result of the test method execution. Can be one of these values: • Pass • Fail • CompileFail • Skip
`QueueItemId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Points to the ApexTestQueueItem which is the class that this test method is part of.

Field Name	Details
`RunTime`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The time it took the test method to run, in milliseconds.
`StackTrace`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** The Apex stack trace if the test failed; otherwise, `null`.
`TestTimestamp`	**Type** dateTime **Properties** Create, Filter, Sort, Update **Description** The start time of the test method.

Usage

You can query the fields of the `ApexTestResult` record that corresponds to a test method executed as part of an Apex class execution.

Each test method execution is represented by a single `ApexTestResult` record. For example, if an Apex test class contains six test methods, six `ApexTestResult` records are created. These records are in addition to the `ApexTestQueueItem` record that represents the Apex class.

Each ApexTestResult record has an associated ApexTestResultLimits on page 399 record, which captures the Apex limits used during execution of the test method.

ApexTestResultLimits

Captures the Apex test limits used for a particular test method execution. An instance of this object is associated with each ApexTestResult record. This object is available in API version 37.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

The `enableApexTestReqViewSetup` field on the ApexSettings metadata type controls the activation of the critical update "Require View Setup permission to access Apex test data". In API version 49.0 and later, when the field is set to `true`, users must have the View Setup and Configuration permission to access this object.

Fields

Field Name	Details
`ApexTestResultId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the associated ApexTestResult object.
`AsyncCalls`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The number of asynchronous calls made during the test run.
`Callouts`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The number of callouts made during the test run.
`Cpu`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The amount of CPU used during the test run, in milliseconds.
`Dml`	**Type** int **Properties** Create, Filter, Group, Sort, Update

Field Name	Details
	Description The number of DML statements made during the test run.
`DmlRows`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The number of rows accessed by DML statements during the test run.
`Email`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The number of email invocations made during the test run.
`LimitContext`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates whether the test run was synchronous or asynchronous.
`LimitExceptions`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates whether your org has any limits that differ from the default limits.
`MobilePush`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The number of mobile push calls made during the test run.
`QueryRows`	**Type** int

Field Name	Details
	Properties Create, Filter, Group, Sort, Update **Description** The number of rows queried during the test run.
`Soql`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The number of SOQL queries made during the test run.
`Sosl`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The number of SOSL queries made during the test run.

Usage

The ApexTestResultLimits object is populated for each test method execution, and it captures the limits used between the Test.startTest() and Test.stopTest() methods. If startTest() and stopTest() aren't called, limits usage is not captured. Note the following:

- The associated test method must be run asynchronously.
- Limits for asynchronous Apex operations (batch, scheduled, future, and queueable) that are called within test methods are not captured.
- Limits are captured only for the default namespace.

ApexTestRunResult

Contains summary information about all the test methods that were run in a particular Apex job. This object is available in API version 37.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

The `enableApexTestReqViewSetup` field on the ApexSettings metadata type controls the activation of the critical update "Require View Setup permission to access Apex test data". In API version 49.0 and later, when the field is set to `true`, users must have the View Setup and Configuration permission to access this object.

Fields

Field Name	Details
`AsyncApexJobId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The parent Apex job ID for the result.
`ClassesCompleted`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The total number of classes executed during the test run.
`ClassesEnqueued`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The total number of classes enqueued during the test run.
`EndTime`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The time at which the test run ended.
`IsAllTests`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field Name	Details
	Description Indicates whether all Apex test classes were run.
JobName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Reserved for future use.
MethodsCompleted	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The total number of methods completed during the test run. This value is updated after each class is run.
MethodsEnqueued	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The total number of methods enqueued for the test run. This value is initialized before the test runs.
MethodsFailed	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The total number of methods that failed during this test run. This value is updated after each class is run.
Source	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The source of the test run, such as the Developer Console.

Field Name	Details
`StartTime`	**Type** dateTime **Properties** Create, Filter, Sort, Update **Description** The time at which the test run started.
`Status`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The status of the test run. Values include: • Queued • Processing • Aborted • Completed • Failed
`TestTime`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The time it took the test to run, in seconds.
`UserId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The user who ran the test run.

ApexTestSuite

Represents a suite of Apex classes to include in a test run. A TestSuiteMembership object associates each class with the suite. This object is available in API version 36.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

The `enableApexTestReqViewSetup` field on the ApexSettings metadata type controls the activation of the critical update "Require View Setup permission to access Apex test data". In API version 49.0 and later, when the field is set to `true`, users must have the View Setup and Configuration permission to access this object.

Fields

Field Name	Description
`TestSuiteName`	**Type** string **Properties** Create, Filter, Group, Sort, Unique, Update **Description** The name of the Apex test suite. This label appears in the user interface. This value is case-sensitive and must be unique.

Usage

Insert a TestSuiteMembership object using an API call to associate an Apex class with an ApexTestSuite object. (ApexTestSuite and TestSuiteMembership aren't editable through Apex DML.) To remove the class from the test suite, delete the TestSuiteMembership object. If you delete an Apex test class or test suite, all TestSuiteMembership objects that contain that class or suite are deleted.

The following SOQL query returns the membership object that relates this Apex class to this test suite.

```
SELECT Id FROM TestSuiteMembership WHERE ApexClassId = '01pD0000000Fhy9IAC'
    AND ApexTestSuiteId = '05FD00000004CDBMA2'
```

SEE ALSO:

TestSuiteMembership

ApexTrigger

Represents an Apex trigger.

Note: Although Apex classes and triggers have the Create and Update field properties, a runtime exception occurs if you try to create or update them using the API. Instead, use the Ant Migration Tool, the Salesforce user interface, or the Salesforce Extensions for Visual Studio Code to create or update Apex classes or triggers.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Fields

Field	Details
`ApiVersion`	**Type** double **Properties** Create, Filter, Sort, Update **Description** The API version for this trigger. Every trigger has an API version specified at creation.
`Body`	**Type** textarea **Properties** Create, Nillable, Update **Description** The Apex trigger definition. Limit: 1 million characters.
BodyCrc	**Type** double **Properties** Create, Defaulted on create, Filter, Nillable, Sort, Update **Description** The CRC (cyclic redundancy check) of the class or trigger file.
`IsValid`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether any dependent metadata has changed since the trigger was last compiled (`true`) or not (`false`).
`LengthWithoutComments`	**Type** int **Properties** Create, Filter, Group, Sort, Update

Field	Details
	Description Length of the trigger without comments
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Name of the trigger. Limit: 255 characters
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
`Status`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The current status of the Apex trigger. The following string values are valid: • `Active`—The trigger is active. • `Inactive`—The trigger is inactive, but not deleted. • `Deleted`—The trigger is marked for deletion. This is useful for managed packages, because it allows a class to be deleted when a managed package is updated.

Field	Details
	Note: `Inactive` is not valid for ApexClass. For more information, see the *Metadata API Developer Guide*.
`TableEnumOrId`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Specifies the object associated with the trigger, such as Account or Contact.
`UsageAfterDelete`	**Type** boolean **Properties** Create, Filter, Update **Description** Specifies whether the trigger is an `after delete` trigger (`true`) or not (`false`).
`UsageAfterInsert`	**Type** boolean **Properties** Create, Filter, Update **Description** Specifies whether the trigger is an `after insert` trigger (`true`) or not (`false`).
`UsageAfterUndelete`	**Type** boolean **Properties** Create, Filter, Update **Description** Specifies whether the trigger is an `after undelete` trigger (`true`) or not (`false`).
`UsageAfterUpdate`	**Type** boolean **Properties** Create, Filter, Update **Description** Specifies whether the trigger is an `after update` trigger (`true`) or not (`false`).
`UsageBeforeDelete`	**Type** boolean **Properties** Create, Filter, Update

Field	Details
	Description Specifies whether the trigger is a `before delete` trigger (`true`) or not (`false`).
`UsageBeforeInsert`	**Type** boolean **Properties** Create, Filter, Update **Description** Specifies whether the trigger is a `before insert` trigger (`true`) or not (`false`).
`UsageBeforeUpdate`	**Type** boolean **Properties** Create, Filter, Update **Description** Specifies whether the trigger is a `before update` trigger (`true`) or not (`false`).
`UsageIsBulk`	**Type** boolean **Properties** Create, Filter, Update **Description** Specifies whether the trigger is defined as a bulk trigger (`true`) or not (`false`). Note: This field is not used for Apex triggers saved using Salesforce API version 10.0 or higher: all triggers starting with that version are automatically considered bulk, and this field will always return `true`.

SEE ALSO:

ApexClass

Developer Guide: Apex Developer Guide

AppAnalyticsQueryRequest

Represents a request for AppExchange App Analytics data.

AppExchange App Analytics is available for packages that passed security review and are registered to a License Management App (LMA). Usage data is provided as log files, as month-based usage summaries, or as point-in-time subscriber snapshots. Log files, monthly summaries, and subscriber snapshots are downloadable comma-separated value (.csv) files.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

See Request AppExchange App Analytics in the *ISVforce Guide*.

Fields

Field Name	Details
`DataType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The type of usage data being requested. Valid values include: • `PackageUsageLog` • `PackageUsageSummary` • `SubscriberSnapshot` Note: In Summer '20, we changed the enum names from `CustomObjectUsageSummary` and `CustomObjectUsageLog` to `PackageUsageSummary` and `PackageUsageLog`. If you wrote integrations using `CustomObjectUsageSummary` or `CustomObjectUsageLog`, they continue to work only with v47 and earlier. After you upgrade to v48, you must update the `DataType` to `PackageUsageSummary` and `PackageUsageLog`.
`DownloadExpirationTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time when the download URL is no longer valid. The expiration time is 60 minutes after the query is completed.
`DownloadSize`	**Type** long **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The size of the AppExchange App Analytics results file available for download, in bytes.
DownloadUrl	**Type** textarea **Properties** Nillable **Description** URL that the user can download data from. Populated after the request is completed. This URL expires and is removed after the expiration time is reached.
EndTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort **Description** Enter end time in format yyyy-MM-ddTHH:mm:ss. Example: 2019-04-15T12:00:00
ErrorMessage	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Stores error message text that results from this query.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort

Field Name	Details
	Description The timestamp for when the current user last viewed this record. If this value is null, it's possible that this record was referenced (LastReferencedDate) and not viewed.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The auto-generated name of the App Analytics query request.
`OrganizationIds`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** Optional. Enter up to 16 comma-separated org IDs without spaces between IDs. Or enter up to 15 comma-separated org IDs with spaces between the IDs. To request data for all the orgs the package is installed in, leave the field blank.
`PackageIds`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** Optional. Enter up to 16 comma-separated package IDs without spaces between IDs. Or enter up to 15 comma-separated package IDs with spaces between the IDs. Use the subscriber package ID that begins with `033`. To retrieve a list of your second-generation managed package IDs, run `sfdx force:package:list --verbose` in Salesforce CLI. To request data on all packages registered to this License Management App, leave the field blank.
`RequestState`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Status of the query request. Valid values are:

Field Name	Details
	• `New` • `Pending` • `Complete` • `Expired` • `Failed` • `NoData`
`StartTime`	**Type** dateTime **Properties** Create, Filter, Sort **Description** Required. Enter start time in format yyyy-MM-ddTHH:mm:ss. Example: 2019-04-14T12:00:00

Usage

To request usage data, log into the License Management Org (LMO) that your package is registered to, and initiate the API request from the LMO. In a 24-hour period, you can download a maximum 20 GB of AppExchange App Analytics data.

See Download Package Log Files, Usage Summaries, and Subscriber Snapshots in the *ISVforce Guide*.

If requests to view package data are inactive for 90 days, we stop collecting the log file data. To resume data collection for package log files, Request AppExchange App Analytics in the Partner Community.

AppDefinition

Represents the metadata of an app and its navigation items. Metadata is returned only for apps that the current user can access. This object is available in API version 43.0 and later.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field Name	Details
`Description`	**Type** string

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The optional description of the application.
`DeveloperName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The developer name of the application.
`DurableId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A unique virtual Salesforce ID for the application.
`HeaderColor`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The header color in the application. Specify the color with a hexadecimal code, such as #0000FF for blue.
`Id`	**Type** ID **Properties** Defaulted on create, Filter, Group, idLookup, Sort **Description** A default Salesforce ID.
`IsLargeFormFactorSupported`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the Large form factor is set in the `CustomApplication` metadata.

Field Name	Details
`IsMediumFormFactorSupported`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the Medium form factor is set in the `CustomApplication` metadata.
`IsNavAutoTempTabsDisabled`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the navigation automatically creates temporary tabs settings.
`IsNavPersonalizationDisabled`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether navigation personalization is disabled.
`IsOverrideOrgTheme`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether to override the global theme for the org. When `true`, the color scheme and logo that the user has set are used. When `false`, the global theme for the org is used, even if the user has set a color scheme and logo.
`IsSmallFormFactorSupported`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the Small form factor is set in the `CustomApplication` metadata.
`Label`	**Type** string

Field Name	Details
	Properties Filter, Nillable, Sort **Description** The localized label value corresponding to the MasterLabel field.
`LogoUrl`	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** The logo URL of the application as selected by the admin.
`MasterLabel`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The non-translated label entered when the application was created.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace of the application.
`NavType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of navigation for the application. The value `Standard` is for Lightning Experience. The value `Console` is for Salesforce console. A null value is for Salesforce Classic.
`UiType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Indicates the type of custom application. The value `Aloha` is for Salesforce Classic, and `Lightning` is for Lightning Experience.

Field Name	Details
`UtilityBar`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ID of the utility bar associated with this application.

AppExtension

Represents a connection between the Field Service mobile app and another app, typically for passing record data to the Salesforce mobile app or other apps. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
`AppExtensionLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The label in the UI for the app extension.
`AppExtensionName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The API name of the app extension.
`FieldServiceMobileSettingsId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** The ID of a set of field service mobile settings.
`InstallationUrl`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The URL that takes the user to the app install location, such as the App Store or Google Play.
`LaunchValue`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** A value directing the Field Service app to the appropriate app extension. The Launch Value can be a static URL or a dynamic value that you can represent with certain tokens. These tokens pass field information from the record that the user is currently viewing. The basic format for these tokens is based on the field names; for example: **{!$Name}**.
`ScopedToObjectTypes`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates the types of records from which the app extension can be activated. Scoping an app extension to an object lets users activate the app extension from records of the specified type. For example, to scope to both work orders and service appointments you would use the value `WorkOrder,ServiceAppointment`.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A picklist of types of app extensions: iOS, Android, Flow, and Lightning Apps

AppMenuItem

Represents the organization's default settings for items in the app menu or App Launcher.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`

Fields

Field	Details
`ApplicationId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The 15-character ID for the menu item.
`CanvasAccessMethod`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The access method for the canvas app. Values can be: • `Get`—OAuth Webflow • `Post`—Signed Request
`CanvasEnabled`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates if the app menu item is a canvas app (`true`) or not (`false`). The default setting is `false`.
`CanvasOptions`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Represents the options enabled for a canvas connected app. The options are:

Field	Details
	• `PersonalEnabled`—The app is enabled as a canvas personal app. • `HideHeader`—The publisher header, which contains the "What are you working on?" text, is hidden. • `HideShare`—The publisher **Share** button is hidden. This field is available in API version 34.0 and later.
`CanvasReferenceId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The canvas app unique identifier.
`CanvasSelectedLocations`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The selected locations for the canvas app which define where the canvas app can appear in the user interface. For example: `Chatter,ChatterFeed,Publisher,ServiceDesk`
`CanvasUrl`	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** The URL of the canvas app.
`Description`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A description of this menu item.
`IconUrl`	**Type** url **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The icon for the menu item’s application.
InfoUrl	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** The URL for more information about the application.
IsAccessible	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, the current user is authorized to use the app. The default setting is `false`.
IsRegisteredDeviceOnly	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, indicates that the app is available to registered devices only. The default setting is `false`. Available in API version 49.0 and later.
IsUsingAdminAuthorization	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, the app is pre-authorized for certain users by the administrator. The default setting is `false`.
IsVisible	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort, Update **Description** If `true`, the app is visible to users of the organization. The default setting is `false`.

Field	Details
Label	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The app's name.
LogoUrl	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** The logo for the menu item's application. The default is the initials of the `Label` value.
MobileAppBinaryId	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The URL for the Mobile App Binary file.
MobileAppInstallUrl	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** The location mobile users are directed to install the app. Available in API version 49.0 and later.
MobileAppInstalledDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that a user installed a mobile app. Available in API version 49.0 and later.
MobileAppInstalledVersion	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The version of the user's installed mobile app. Available in API version 49.0 and later.
MobileAppVer	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The version number of the mobile app. Available in API version 49.0 and later.
MobileDeviceType	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The supported device form factors for the mobile app. Available in API version 49.0 and later.
MobileMinOsVer	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The minimum version required for the app. Available in API version 49.0 and later.
MobilePlatform	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The mobile platform for the app. Possible values include: • `android - Android` • `ios - iOS` Available in API version 49.0 and later.
MobileStartUrl	**Type** url **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The location mobile users are directed to after they've authenticated. This field is used with connected apps and Experience Builder sites. For sites only, this location is a fully qualified domain name. For other apps, it's a relative URL.
`Name`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The API name of the item.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values: • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
`SortOrder`	**Type** int **Properties** Filter, Group, Sort **Description** The index value that controls where this item appears in the menu. For example, a menu item with a sort order of 5 appears between items with sort order values of 3 and 9.
`StartUrl`	**Type** url

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** For a connected app, the location users are directed to after they've authenticated. Otherwise, the application's default start page.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of application represented by this item. The types are: • `ConnectedApplication` • `Network` • `ServiceProvider` • `TabSet`
`UserSortOrder`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The index value that represents where the user set this item in the menu (or App Launcher). For example, an item with a sort order value of 5 appears between items with sort order values of 3 and 9. This value is separate from SortOrder so you can create logic incorporating both values. For example, if you want the user-sorted items to appear first, followed by the organization order for the rest, use: `SELECT ApplicationId,SortOrder,UserSortOrder FROM AppMenuItem order by userSortOrder NULLS LAST, sortOrder NULLS LAST`

Usage

Use this read-only object to view an entry in the Lightning Platform app menu or the App Launcher. You can create a SOQL query to retrieve all items, even items the user does not see from the user interface.

There are many ways you can use AppMenuItem. Here are some examples:

- Build your own App Launcher or app menu in Salesforce. Create a custom page showing all the apps you have access to and that lets you run them using single sign-on.
- Build your own App Launcher or app menu on a tablet or mobile app. You can have your own app for launching applications on various mobile devices.

- Build an app launcher into your company's intranet. There's no need to have it run on Salesforce because Salesforce APIs let you integrate with Salesforce programmatically and build an app launcher.

Tip: To get metadata information about apps and their tabs, use the Apex `Schema.describeTabs()` method, REST API `/vXX.X/tabs/` resource, or SOAP API `describeTabs()` call.

AppointmentSchedulingPolicy

Represents a set of rules for scheduling appointments using Lightning Scheduler. This object is available in API version 45.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`AppointmentStartTimeInterval`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The proposed time interval in minutes between appointment start times. For example, set the interval to 15. Appointments can then begin at the top of the hour and at 15-minute intervals thereafter (10:00 AM, 10:15 AM, 10:30 AM, and so on). Possible values are: • `5` • `10` • `15` • `20` • `30` • `45` • `60` • `90` • `120` • `150` • `180` • `240` • `300` • `360` • `420` • `480`

Field	Details
DeveloperName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The API name of the AppointmentSchedulingPolicy object.
ExtCalEventHandlerId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The API name of the custom Apex class that checks service resources' external calendar events and returns the time slots where service resources are already booked. Available in API version 50.0 and later.
IsOrgDefault	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this scheduling policy is the default appointment scheduling policy for Lightning Scheduler appointments in this org.
Language	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the appointment scheduling policy. Possible values are: • `Possible` values are: • `da` (Danish) • `de` (German) • `en_US` (English) • `es` (Spanish) • `es_MX` (Spanish - Mexican) • `fi` (Finnish) • `fr` (French) • `it` (Italian)

Field	Details
	• ja (Japanese) • ko (Korean) • nl_NL (Dutch) • no (Norwegian) • pt_BR (Portuguese - Brazilian) • ru (Russian) • sv (Swedish) • th (Thai) • zh_CN (Chinese - Simplified) • zh_TW (Chinese - Traditional)
MasterLabel	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The label for the appointment scheduling policy.
ShouldEnforceExcludedResource	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this appointment scheduling policy prevents excluded service resources from being assigned to appointments.
ShouldEnforceRequiredResource	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this appointment scheduling policy allows only required service resources to be assigned to appointments.
ShouldMatchSkill	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this appointment scheduling policy allows only required service resources who have certain skills to be assigned to appointments.

Field	Details
ShouldMatchSkillLevel	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this appointment scheduling policy allows only required service resources who have certain skills and skill levels to be assigned to appointments.
ShouldRespectVisitingHours	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this appointment scheduling policy prevents users from scheduling appointments outside of an account's visiting hours.
ShouldUsePrimaryMembers	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this appointment scheduling policy allows only service resources who are primary members of a service territory to be assigned to appointments.
ShouldUseSecondaryMembers	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this appointment scheduling policy allows service resources who are secondary members of a service territory to be assigned to appointments.

Approval

Represents an approval request for a Contract.

Note: This object is read-only and is specific to approvals on the Contract object. It isn't equal to or involved in the approval processes represented by the ProcessInstance, which is more powerful.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`ApproveComment`	**Type** string **Properties** Filter, Nillable, Sort **Description** Text entered by the user when they approved or rejected this approval request. Required. Limit: 4,000 characters.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`OwnerId`	**Type** reference **Properties** Filter, Group, Sort **Description** Required. ID of the User being asked to approve or reject the approval request. Must be a valid User ID. Required.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** Required. ID of the Contract associated with this approval request. Must be a valid contract ID.
`RequestComment`	**Type** string **Properties** Filter, Nillable, Sort

Field	Details
	Description Text entered by the User who created the approval request. Optional. This field can't be updated after the Approval has been created. Limit: 4,000 characters.
`Status`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Required. Status of this approval request. One of the following picklist values: • `Pending`—Specified only when the Approval request is created (`create()` call) • `Approved`—Specified only when the Approval request is approved (`update()` call) • `Rejected`—Specified when the Approval request is rejected (`update()` call) or when it is created (`create()` call) and immediately rejected for archival/historical purposes.

Usage

This object allows client applications to programmatically handle approval requests for a Contract. Initially, to request a Contract approval, a client application might create a new Approval request record, specifying the `ParentId`, `OwnerId` (user approving or rejecting the request), `Status` (Pending), and (optionally) `RequestComment` fields. Note that when a client application creates the first approval request, if the value of the Contract `Status` field is Draft, then the Approval `Status` for this record is automatically changed to In Approval Process (see ContractStatus for more information).

A client application might subsequently update an existing Approval request, specifying the `Status` (Approved or `Rejected`) and an `ApproveComment` (required); the `RequestComment` field can't be updated. Updating an Approval record (either to approve or reject) requires the client application to be logged in with "Approve Contract" permission. To update an Approval request, its `Status` must be Pending—a client application can't update an Approval that has already been Approved or Rejected. To re-submit an approval request for a given Contract, a client application must create a new, separate Approval record and repeat the approval process.

Once a Contract has been approved (not rejected), the Contract `LastApprovedDate` field is automatically updated, however the Contract `Status` field isn't updated, it keeps the value InApproval.

An approved Contract must be activated explicitly. Client applications can activate a Contract by setting the value in its `Status` field to Activated, or a User can activate a Contract via the Salesforce user interface.

A Contract can have multiple approval requests in various states (Pending, Approved, and Rejected). In addition, one User can have multiple approval requests associated with the same Contract.

Client applications can't explicitly deleteApproval records. Approval records are deleted automatically if the parent Contract is deleted.

SEE ALSO:

Object Basics

AppTabMember

Represents the list of tabs for each of the available apps. This object is available in API version 43.0 and later.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field Name	Details
AppDefinitionId	**Type** string **Properties** Filter, Nillable, Sort **Description** The ID of the `AppDefinition` object.
DurableId	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A unique virtual Salesforce ID for the color.
SortOrder	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number used to sort this tab in the application.
TabDefinitionId	**Type** string **Properties** Filter, Nillable, Sort **Description** The ID of the `TabDefinition` object.
WorkspaceDriverField	**Type** string

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** Refers to the workspace mapping in the `CustomApplication` Metadata API object.

*`Article Type`*__DataCategorySelection

A data category selection represents a data category that classifies an article. This object is available in API version 19.0 and later.

This object can be used to associate an article with data categories from a data category group or to query the category selections for an article.

The object name is variable and has a syntax of *`Article Type`*__DataCategorySelection, where *`Article Type`* is the `Object Name` for the article type associated with the article. For example, `Offer__DataCategorySelection` represents the association between the `Offer` article type and its data categories. Every article is associated with an article type.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `getDeleted()`, `retrieve()`

Special Access Rules

Knowledge must be enabled in your org. Not available in Lightning Knowledge. Users can only access, create or delete data category selection visible to their role, permission set, or profile. If a user has partial visibility on an article's categorization, only the visible categories are returned.

Fields

Field Name	Details
`DataCategoryGroupName`	**Type** DataCategoryGroupReference **Properties** Create **Description** Unique name of the data category group which has categories associated with the article.
`DataCategoryName`	**Type** DataCategoryGroupReference **Properties** Create

Field Name	Details
	Description Unique name of the data category associated with the article.
`ParentId`	**Type** reference **Properties** Create, Filter **Description** ID of the article associated with the data category selection.

Usage

Every article in Salesforce Knowledge can be categorized. A data category selection represents a category that has been selected to classify an article. You can use the *`Article Type`*__DataCategorySelection object to query and manage article categorization in your org. Client applications can create a categorization for an article with a Draft status. They can also delete and query article categorizations.

Note: When using *`Article Type`*__DataCategorySelection to classify an article, you can't select both a category (for example USA) and one of its descendants (California) or ascendant categories (North America). In this case, only the first category is selected.

Answers zones use QuestionDataCategorySelection to classify questions.

SOQL Sample

The following SOQL query returns the data category selections used to classify the article whose ID is `ka0D000000005ApIAI`.

```
SELECT Id,DataCategoryName, ParentId
        FROM Offer__DataCategorySelection WHERE ParentId='ka0D000000005ApIAI'
```

This clause only returns category unique names. To retrieve category labels use the following clause:

```
SELECT Id,toLabel(DataCategoryName), ParentId
        FROM Offer__DataCategorySelection WHERE ParentId='ka0D000000005ApIAI'
```

Tip: You can also use relationship queries to retrieve categorizations from an article type.

SEE ALSO:

QuestionDataCategorySelection

Knowledge

Asset

Represents an item of commercial value, such as a product sold by your company or a competitor, that a customer has purchased and installed.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`AccountId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** (Required) ID of the Account associated with this asset. Must be a valid account ID. Required if `ContactId` isn't specified.
`AssetLevel`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The asset's position in an asset hierarchy. If the asset has no parent or child assets, its level is 1. Assets that belong to a hierarchy have a level of 1 for the root asset, 2 for the child assets of the root asset, 3 for their children, and so forth. Note: On assets created before the introduction of this field, the asset level defaults to –1. After the asset record is updated, the asset level is calculated and automatically updated.
`AssetProvidedById`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The account that provided the asset, typically a manufacturer.
`AssetServicedById`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The account in charge of servicing the asset.

Field	Details
Availability	**Type** percent **Properties** Filter, Nillable, Sort **Description** The percentage of expected uptime where the asset was available for use.
AverageUptimePerDay	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The average number of hours per day the asset is expected to be available for use.
ContactId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Required if `AccountId` isn't specified. ID of the Contact associated with this asset. Must be a valid contact ID that has an account parent (but doesn't need to match the asset's `AccountId`).
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of the asset.
DigitalAssetStatus	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Status of digital tracking of the asset. The default picklist includes the following values: • `On` • `Off` • `Warning` • `Error`

Field	Details
ExternalIdentifier	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the matching record in an external system. This field is available from API version 49.0 and later.
InstallDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Date when the asset was installed.
IsCompetitorProduct	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this Asset represents a product sold by a competitor (`true`) or not (`false`). Default value is `false`. Its UI label is Competitor Asset.
IsInternal	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates that the asset is produced or used internally (`true`) or not (`false`). Default value is `false`. Its UI label is Internal Asset.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the asset was last modified. Its UI label is Last Modified Date.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort

Field	Details
	Description The date and time that the asset was last viewed.
`LocationId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The asset's location. Typically, this location is the place where the asset is stored, such as a warehouse or van.
`ManufactureDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date when the asset was manufactured. This field is available from API version 49.0 and later.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** (Required) Name of the asset. Label is Asset Name.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The asset's owner. By default, the asset owner is the user who created the asset record. Its UI label is Asset Owner.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The asset's parent asset. Its UI label is Parent Asset.

Field	Details
Price	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** Price paid for this asset.
Product2Id	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** (Optional) ID of the Product2 associated with this asset. Must be a valid Product2 ID. Its UI label is Product.
ProductCode	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The product code of the related product.
ProductDescription	**Type** string **Properties** Filter, Sort, Nillable **Description** The product description of the related product.
ProductFamily	**Type** picklist **Properties** Filter, Group, Sort, Nillable **Description** The product family of the related product.
PurchaseDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description Date on which this asset was purchased.
Quantity	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Quantity purchased or installed.
Reliability	**Type** percent **Properties** Filter, Nillable, Sort **Description** The percentage of expected uptime where the asset wasn't subject to unplanned downtime.
RootAssetId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** (Read only) The top-level asset in an asset hierarchy. Depending on where an asset lies in the hierarchy, its root could be the same as its parent. Its UI label is Root Asset.
SerialNumber	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Serial number for this asset.
Status	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Customizable picklist of values. The default picklist includes the following values: • Purchased • Shipped • Installed

Field	Details
	• `Registered` • `Obsolete`
`StatusReason`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The explanation of the device status. This field is available from API version 49.0 and later. Possible values are: • `Not Ready` • `Off` • `Offline` • `Online` • `Paused` • `Standby`
`StockKeepingUnit`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The SKU assigned to the related product.
`SumDowntime`	**Type** double **Properties** Filter, Nillable, Sort **Description** Accumulated downtime (planned and unplanned), determined as follows: • When only `UptimeRecordStart` is set, the sum of all downtime from `UptimeRecordStart`. • When `UptimeRecordStart` and `UptimeRecordEnd` are set, the sum of all downtime from `UptimeRecordStart` to `UptimeRecordEnd`. Otherwise, downtime isn't accumulated.
`SumUnplannedDowntime`	**Type** double **Properties** Filter, Nillable, Sort

Field	Details
	Description Accumulated unplanned downtime, determined as follows: • When only `UptimeRecordStart` is set, the sum of all unplanned downtime from `UptimeRecordStart`. • When `UptimeRecordStart` and `UptimeRecordEnd` are set, the sum of all unplanned downtime from `UptimeRecordStart` to `UptimeRecordEnd`. Otherwise, unplanned downtime is not accumulated.
`TotalLifecycleAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** The total amount of revenue for the asset, including revenue from each stage in the asset lifecycle.
`UptimeRecordEnd`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date that `SumDowntime` and `SumUnplannedDowntime` are accumulated until.
`UptimeRecordStart`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date from which `SumDowntime` and `SumUnplannedDowntime` are accumulated.
`UsageEndDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Date when usage for this asset ends or expires.
`Uuid`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description The unique ID for the asset. This field is available from API version 49.0 and later.

Usage

Use this object to track products sold to customers. With asset tracking, a client application can quickly determine which products were previously sold or are currently installed at a specific account. You can also create hierarchies of up to 10,000 assets.

For example, your organization might want to renew and up-sell opportunities on products sold in the past. Similarly, your organization might want to track competitive products that exist in a customer environment that could potentially be replaced or swapped out.

Asset tracking is also useful for product support, providing detailed information to assist with product-specific support issues. For example, the `PurchaseDate` or `SerialNumber` could indicate whether a given product has certain maintenance requirements, including product recalls. Similarly, the `UsageEndDate` might indicate when the asset was removed from service or when a license or warranty expires.

If an application creates an Asset record, it must specify a `Name` and either an `AccountId`, `ContactId`, or both.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

AssetFeed
Feed tracking is available for the object.

AssetHistory
History is available for tracked fields of the object.

AssetOwnerSharingRule
Sharing rules are available for the object.

AssetShare
Sharing is available for the object.

SEE ALSO:

Object Basics

AssetDowntimePeriod

Represents a period during which an asset is not able to perform as expected. Downtime periods include planned activities, such as maintenance, and unplanned events, such as mechanical breakdown. This object is available in API version 49.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
AssetDowntimePeriodNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The unique number of this asset downtime period record.
AssetId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the asset this asset downtime period record is for.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** The description of this asset downtime period.
DowntimeType	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The type of this asset downtime period. Possible values are: • Planned • Unplanned
EndTime	**Type** dateTime **Properties** Create, Filter, Sort, Update **Description** The time this asset downtime period ended.
IsExcluded	**Type** boolean

Field	Details
	Properties Defaulted on create, Filter, Group, Sort **Description** Whether this asset downtime period is excluded from the calculation of accumulated downtime and accumulated unplanned downtime, and therefore not included in availability and reliability calculations.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`StartTime`	**Type** dateTime **Properties** Create, Filter, Sort, Update **Description** The time this asset downtime period started.

AssetOwnerSharingRule

Represents the rules for sharing an Asset with users other than the owner. This object is available in API version 33.0 and later.

Note: To enable access to this object for your org, contact Salesforce customer support. However, we recommend that you instead use Metadata API to programmatically update owner sharing rules because it triggers automatic sharing rule recalculation. The SharingRules Metadata API type is enabled for all orgs.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can’t access this object.

Fields

Field	Details
`AssetAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of sharing being allowed. The possible values are: • `Read` • `Edit`
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object’s name in a managed package and the changes are reflected in a subscriber’s organization. Corresponds to **Rule Name** in the user interface. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort

Field	Details
	Description The ID representing the source group. Cases owned by users in the source group trigger the rule to give access.
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the target user or group. Target users or groups are given access.

Usage

Use this object to manage the sharing rules for assets. General sharing uses this object.

SEE ALSO:

Metadata API Developer Guide: SharingRules

AssetRelationship

Represents a non-hierarchical relationship between assets due to replacement, upgrade, or other circumstances.

Asset relationships appear in the Primary Assets and Related Assets related lists on asset records in the UI.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
AssetId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The replacement asset.
AssetRelationshipNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** An auto-generated number identifying the asset relationship.
FromDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The day the replacement asset is installed.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the asset relationship was last modified. Its label in the user interface is `Last Modified Date`.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date the asset relationship was last viewed.
RelatedAssetId	**Type** reference **Properties** Create, Filter, Group, Sort, Update

Field Name	Details
	Description The asset being replaced.
`RelationshipType`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The type of relationship between the assets. This field comes with three values—Replacement, Upgrade, and Crossgrade—but you can create more in Setup.
`ToDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The day the replacement asset is uninstalled.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

AssetRelationshipFeed
Feed tracking is available for the object.

AssetRelationshipHistory
History is available for tracked fields of the object.

AssetShare

Represents a sharing entry on an Asset. This object is available in API version 33.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Customer Portal users can't access this object.

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field	Details
AssetAccessLevel	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Level of access that the User or Group has to the Asset. The possible values are: • Read • Edit • All This value is not valid for creating or deleting records. This field must be set to an access level that is higher than the organization's default access level for cases.
AssetId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the Asset associated with this sharing entry. This field can't be updated.
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (true) or not (false). Label is **Deleted**.
RowCause	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can only write to this field when its value is either omitted or set to Manual (default). You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Valid values include:

Field	Details
	• `Manual`—The User or Group has access because a user with "All" access manually shared the Asset with them. • `Owner`—The User is the owner of the Asset. • `Rule`—The User or Group has access via an Asset sharing rule. • `GuestRule`—The User or Group has access via an Asset guest user sharing rule. • `LpuImplicit`—The User has access to records owned by high-volume Experience Cloud site users via a share group.
`UserOrGroupId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the User or Group that has been given access to the Asset. This field can't be updated.

Usage

This object allows you to determine which users and groups can view and edit Asset records owned by other users.

If you attempt to create a new record that matches an existing record, request updates any modified fields and returns the existing record.

AssetTag

Associates a word or short phrase with an Asset.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ItemId`	**Type** reference **Properties** Create, Filter **Description** ID of the tagged item.

Field Name	Details
`Name`	**Type** string **Properties** Create, Filter **Description** Name of the tag. If this value does not already exist, a new TagDefinition is created and becomes the parent of this Tag object. Otherwise, a TagDefinition with the same name becomes the parent of this Tag object. Parent relationships are created automatically.
`TagDefinitionId`	**Type** reference **Properties** Filter **Description** ID of the parent TagDefinition object that owns the tag.
`Type`	**Type** picklist **Properties** Create, Filter, Restricted picklist **Description** Defines the visibility of a tag. Valid values: • `Public`—The tag can be viewed and manipulated by all users in an organization. • `Personal`—The tag can be viewed or manipulated only by a user with a matching `OwnerId`.

Usage

AssetTag stores the relationship between its parent TagDefinition and the Asset being tagged. Tag objects act as metadata, allowing users to describe and organize their data.

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

AssetTokenEvent

The documentation has moved to AssetTokenEvent in the *Platform Events Developer Guide*.

AssetWarranty

Defines the warranty terms applicable to an asset along with any exclusions and extensions. This object is available in API version 50.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`AssetId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the asset this warranty term applies to.
`AssetWarrantyNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The identifier of the asset warranty record.
`EndDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date on which this warranty term expires.
`ExchangeType`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The type of exchange offered by this warranty term.

Field	Details
Exclusions	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of any exclusions.
ExpensesCovered	**Type** percent **Properties** Create, Filter, Nillable, Sort, Update **Description** The percentage of expenses covered.
ExpensesCoveredEndDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date on which cover for expenses ends.
IsTransferable	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Defines whether the warranty term can be transferred to a new owner.
LaborCovered	**Type** percent **Properties** Create, Filter, Nillable, Sort, Update **Description** The percentage of labor covered.
LaborCoveredEndDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date on which cover for labor ends.

Field	Details
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the asset warranty term was last modified. Its label in the user interface is `Last Modified Date`.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the asset warranty term was last viewed.
PartsCovered	**Type** percent **Properties** Create, Filter, Nillable, Sort, Update **Description** The percentage of parts covered.
PartsCoveredEndDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date on which cover for parts ends.
Pricebook2Id	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the price book item associated with this asset warranty term.
StartDate	**Type** date **Properties** Create, Filter, Group, Sort, Update

Field	Details
	Description The date on which cover under this warranty term starts.
WarrantyTermId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the warranty term this asset warranty term extends.
WarrantyType	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The type of the warranty.

AssignedResource

Represents a service resource who is assigned to a service appointment in Field Service and Lightning Scheduler. Assigned resources appear in the Assigned Resources related list on service appointments. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
ActualTravelTime	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The number of minutes that the service resource needed to travel to the service appointment they're assigned to. You can enter a value with up to two decimal places.

Field Name	Details
AssignedResourceNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** An auto-generated number identifying the resource assignment.
EstimatedTravelTime	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The estimated number of minutes needed for the service resource to travel to the service appointment they're assigned to. You can enter a value with up to two decimal places.
IsPrimaryResource	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the service resource is a primary resource or not. The default value is false. Available in API version 47.0 and later.
ServiceAppointmentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The service appointment that the resource is assigned to.
ServiceCrewId	**Type** reference **Properties** Create, Update, Filter, Group, Sort, Nillable **Description** The service crew that the resource is assigned to. Note: Since service resources can represent crews or individuals, appointment are typically assigned to crews in the following way: 1. Create a service resource of the Crew type that represent the crew.

Field Name	Details
	2. Create an assigned resource on the service appointment and select the crew resource in the `ServiceResourceId` field. As an alternative, you can assign appointments to crew members separately. This lets you track each member's travel time and see a list of the crew members in the Assigned Resources related list. To take this approach, create an assigned resource for each crew member. List the crew member in the `ServiceResourceId` field and the crew they belong to in the `ServiceCrewId` field.
`ServiceResourceId`	**Type** reference **Properties** Create, Update, Filter, Group, Sort **Description** The resource who is assigned to the service appointment.

Usage

You can assign multiple service resources to a service appointment. Service resources who are assigned to service appointments cannot be deactivated until they are removed from the appointments.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

AssignedResourceFeed
Feed tracking is available for the object.

AssignmentRule

Represents an assignment rule associated with a Case or Lead.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`, `search()`

Special Access Rules

- This object is read only. Assignment rules are created, configured, and deleted in the user interface.
- Customer Portal users can't access this object.

Fields

Field	Details
`Active`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this assignment rule is active (`true`) or not (`false`).
`Name`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of this assignment rule.
`SobjectType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Type of assignment rule—Case or Lead.

Usage

Before creating or updating a new Case or Lead, a client application can query (by name) the AssignmentRule to obtain the ID of the assignment rule to use, and then assign that ID to the `assignmentRuleId` field of the AssignmentRuleHeader. The AssignmentRuleHeader can be set using either SOAP API or REST API.

Assignment rules can also be specified when creating or upserting Case or Lead objects via the Bulk API or the Bulk 2.0 API.

SEE ALSO:

Object Basics

AssociatedLocation

Represents a link between an account and a location in Field Service. You can associate multiple accounts with one location. For example, a shopping center location may have multiple customer accounts.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
`ActiveFrom`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Date and time the associated location is active.
`ActiveTo`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Date and time the associated location stops being active.
`AssociatedLocationNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** Auto-generated number identifying the associated location.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date the associated location was last modified.
`LastViewedDate`	**Type** dateTime

Field Name	Details
	Properties Filter, Nillable, Sort **Description** The date the associated location was last viewed.
`LocationId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The location associated with the address.
`ParentRecordId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The account associated with the location.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Picklist of address types. The values are: • Bill To • Ship To

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

AssociatedLocationHistory
History is available for tracked fields of the object.

AsyncApexJob

Represents an individual Apex sharing recalculation job, a batch Apex job, a method with the `future` annotation, or a job that implements `Queueable`. Use this object to query Apex batch jobs in your organization.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

The `enableAsyncRequiresViewSetup` field on the ApexSettings metadata type controls the activation of the critical update "Require View Setup permission to enqueue async Apex Jobs". In API version 49.0 and later, when the field is set to `true`, users must have the View Setup and Configuration permission to access this object.

Fields

Field Name	Details
`ApexClassId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the Apex class executing the job. Label is `Class ID`.
`CompletedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time when the job was completed.
`ExtendedStatus`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** If one or more errors occurred during the batch processing, this contains a short description of the first error. A more detailed description of that error, along with any subsequent errors, is emailed to the last user who modified the batch class. This field is available in API version 19.0 and later.
`JobItemsProcessed`	**Type** int **Properties** Filter, Group, Sort **Description** Number of job items processed. Label is `Batches Processed`.

Field Name	Details
`JobType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of job being processed. Valid values are: • `Future` • `SharingRecalculation` • `ScheduledApex` • `BatchApex` • `BatchApexWorker` • `TestRequest` • `TestWorker` • `ApexToken` • `Queueable`
`MethodName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the Apex method being executed. Label is `Apex Method`.
`NumberOfErrors`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Total number of batches with a failure. A batch is considered transactional, so any unhandled exceptions constitute an entire failure of the batch. Label is `Failures`.
`ParentJobId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** For batch Apex jobs that run using chunking implementation, multiple child jobs of type `BatchApexWorker` are created. Each of these child job records contain the job Id of the parent Apex job that started their execution. For batch Apex jobs that run using a non-chunking implementation, child jobs are not created.

Field Name	Details
Status	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The status of the job. Valid values are: • Holding[1] • Queued • Preparing • Processing • Aborted • Completed • Failed [1] This status applies to batch jobs in the Apex flex queue.
TotalJobItems	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Total number of batches processed. Each batch contains a set of records. Label is Total Batches.

Usage

Use this object to query Apex batch jobs in your organization.

AsyncOperationLog

Represents an async operations log containing progress and status information about external synchronizations to the Omnichannel Inventory service. This object is available in API version 51.0 and later.

Supported Calls

delete(), describeLayout(), describeSObjects(), getDeleted(), getUpdated(), query(), retrieve(), search(), undelete()

Special Access Rules

This object is only available in Omnichannel Inventory orgs.

Fields

Field	Details
AsyncOperationNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The auto-generated number assigned to the operation.
Description	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Description of the operation.
Error	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The error message for the operation. Applies only if the operation has an error.
ExternalReference	**Type** string **Properties** Filter, Group, idLookup, Nillable, Sort **Description** The unique external reference ID per type.
FinishedAt	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time the operation finished.
LastStatusUpdateAt	**Type** dateTime **Properties** Filter, Nillable, Sort

Field	Details
	Description The date and time the status of the operation was last updated.
`Request`	**Type** textarea **Properties** Nillable **Description** The request sent to the external service.
`Response`	**Type** textarea **Properties** Nillable **Description** The full response from the external service.
`StartedAt`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time the operation started.
`Status`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The status of the operation. Possible values are: • `Completed` • `Error` • `In Progress` • `New`
`Type`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort

Field	Details
	Description The type of operation that is being tracked. Possible values are: • `Location Management`

AttachedContentDocument

This read-only object contains all `ContentDocument` objects associated with an object.

Supported Calls

`describeSObjects()`

Fields

Field Name	Details
`ContentDocumentId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the attached `ContentDocument`.
`ContentSize`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Size of the document in bytes.
`ContentUrl`	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** URL for links and Google Docs. This field is set only for links and Google Docs, and is one of the fields that determine the `FileType`. This field is available in API version 31.0 and later.

Field Name	Details
ExternalDataSourceName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of the external data source in which the document is stored. This field is set only for external documents that are connected to Salesforce. This field is available in API version 32.0 and later.
ExternalDataSourceType	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Type of external data source in which the document is stored. This field is set only for external documents that are connected to Salesforce. This field is available in APIAPI version 35.0 and later.
FileExtension	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** File extension of the attached `ContentDocument`. This field is available in API version 31.0 and later.
FileType	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Type of document, determined by the file extension.
LinkedEntityId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the record the `ContentDocument` is attached to.

Field Name	Details
SharingOption	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Controls whether or not sharing is frozen for a file. Only administrators and file owners with Collaborator access to the file can modify this field. Default is `Allowed`, which means that new shares are allowed. When set to `Restricted`, new shares are prevented without affecting existing shares. This field is available in API versions 35.0 and later.
Title	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** Title of the attached `ContentDocument`.

Usage

Use this object to list all `ContentDocument` objects attached to an object via a feed post.

To retrieve `ContentDocument` objects, issue a describe call on an object, which returns a query result for each activity since the record was created. You can't directly query this object.

AttachedContentNote

This read-only object contains all ContentNote objects associated with an object. This object is available in API version 35.0 and later.

Supported Calls

`describeSObjects()`

Special Access Rules

- Notes must be enabled.
- Chatter must be enabled.

Fields

Field Name	Details
ContentDocumentId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the attached ContentNote
ContentSize	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Size of the note in bytes.
FileExtension	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** File extension of the attached ContentNote.
FileType	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Type of file for the note. All notes have a file type of SNOTE.
LinkedEntityId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the record the ContentNote is attached to.
TextPreview	**Type** string

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** A preview of the note, up to 255 characters.
`Title`	**Type** string **Properties** Filter, Group, Sort **Description** Title of the note.

Usage

Use this object to list all `ContentNote` objects attached to an object.

To retrieve `ContentNote` objects, issue a describe call on an object, which returns a query result for each note created or attached. You can't directly query this object.

Attachment

Represents a file that a User has uploaded and attached to a parent object.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`Body`	**Type** base64 **Properties** Create, Update **Description** Required. Encoded file data.
`BodyLength`	**Type** int

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** Size of the file (in bytes).
`ConnectionReceivedId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the PartnerNetworkConnection that shared this record with your organization. This field is available if you enabled Salesforce to Salesforce.
`ConnectionSentId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the PartnerNetworkConnection that you shared this record with. This field is available if you enabled Salesforce to Salesforce. This field is supported using API versions earlier than 15.0. In all other API versions, this field's value is null. You can use the new PartnerNetworkRecordConnection object to forward records to connections.
`ContentType`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The content type of the attachment. If the `Don't allow HTML uploads as attachments or document records` security setting is enabled for your organization, you cannot upload files with the following file extensions: `.htm`, `.html`, `.htt`, `.htx`, `.mhtm`, `.mhtml`, `.shtm`, `.shtml`, `.acgi`, `.svg`. When you insert a document or attachment through the API, make sure that this field is set to the appropriate MIME type.
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update

Field	Details
	Description Description of the attachment. Maximum size is 500 characters. This field is available in API version 18.0 and later.
`IsEncrypted`	This information is about Shield Platform Encryption and not Classic Encryption. **Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the attachment is encrypted using Shield Platform Encryption (`true`) or not (`false`). This field is available in API version 34.0 and later.
`IsPartnerShared`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this record is shared with a connection using Salesforce to Salesforce. Label is `Is Shared With Partner`.
`IsPrivate`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this record is viewable only by the owner and administrators (`true`) or viewable by all otherwise-allowed users (`false`). During a create or update call, it is possible to mark an Attachment record as private even if you are not the owner. This can result in a situation in which you can no longer access the record that you just inserted or updated. Label is **Private**. Attachments on tasks or events can't be marked private.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. Name of the attached file. Maximum size is 255 characters. Label is **File Name**.
`OwnerId`	**Type** reference

Field	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the User who owns the attachment. This field was required previous to release 9.0. Beginning with release 9.0, it can be null on create. The owner of an attachment on a task or event must be the same as the owner of the task or event.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the parent object of the attachment. The following objects are supported as parents of attachments: • Account • Asset • Campaign • Case • Contact • Contract • Custom objects • EmailMessage • EmailTemplate • Event • Lead • Opportunity • Product2 • Solution • Task

Note: If you are importing Attachment data and want to set the value for an audit field, such as `CreatedDate`, contact Salesforce. For example, for compliance reasons, you may prefer to set the `CreatedDate` to the date the record was originally created in your system, rather than the date it was imported into Salesforce. Audit fields are automatically updated during API operations unless you request to set these fields yourself.

Usage

The API sends and receives the binary file attachment data encoded as a base64Binary data type. Before creating a record, client applications must encode the binary attachment data as base64. Upon receiving a response, client applications must decode the base64 data to binary (this conversion is usually handled for you by the SOAP client).

The create call restricts these files to a maximum size of 25 MB. For a file attached to a Solution, the limit is 1.5 MB. The maximum email attachment size is 3 MB.

The API supports attachments on email in create, delete, or update calls. The query call does not return attachments parented by email, unless the user performing the query has the “Modify All Data” permission.

Note:

- Attachment records are not searched during text searches.
- When issued by an administrator, the query results include Attachment records from the Recycle Bin.
- When issued by a non-administrator, the `queryAll()` call results do not include Attachment records from the Recycle Bin.

Access to fields depends on the method being used:

- All of the fields are accessible using the `describeSObjects()` and `query()` calls. With the `create()` call, you can insert the `Name`, `ParentId`, `Body`, `IsPrivate`, and `OwnerId` fields.
- To modify existing records, the `update()` call gives you access to change the `Name`, `Body`, `IsPrivate`, and `OwnerId` fields.
- You can access all of the fields using a `query()` call. However, you can't receive the `Body` field for multiple records in a single `query()` call. If your query returns the `Body` field, your client application must ensure that only one row with one Attachment is returned; otherwise, an error occurs. A more effective approach is to return IDs (but not Attachment records in the `Body` field) from a `query()` call and then pass them into `retrieve()` calls that return the `Body` field.
- For information about accessing the attachments of archived activities, see Archived Activities.

SEE ALSO:

Note

Audience

Represents an audience that is defined by criteria and can be assigned and used for targeting in an Experience Cloud site. This object is available in API version 44.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`, `update()`

Fields

Field	Details
`AudienceName`	**Type** string

Field	Details
	Properties Filter, Group, Sort, Update **Description** Name of the audience.
`ContainerId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the site or org that contains the audience. ContainerId is nillable in API versions 47.0 and earlier.
`Description`	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** Description of the audience.
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort, Update **Description** The unique name of the audience in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This field is automatically generated, but you can supply your own value if you create the record using the API. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`FormulaFilterType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Formula filter for the criteria used to define the audience. Valid values are: • `AllCriteriaMatch`—Matching all the conditions (AND). • `AnyCriterionMatches`—Matching at least one condition (OR).

Field	Details
	• `CustomLogicMatches`—Matching condition logic (AND and OR) and numbered criteria groups. This value is available in API version 45.0 and later.
`Language`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Language of the audience. Valid values are: • Chinese (Simplified): `zh_CN` • Chinese (Traditional): `zh_TW` • Danish: `da` • Dutch: `nl_NL` • English: `en_US` • Finnish: `fi` • French: `fr` • German: `de` • Italian: `it` • Japanese: `ja` • Korean: `ko` • Norwegian: `no` • Portuguese (Brazil): `pt_BR` • Russian: `ru` • Spanish: `es` • Spanish (Mexico): `es_MX` Spanish (Mexico) defaults to Spanish for customer-defined translations. • Swedish: `sv` • Thai: `th` The Salesforce user interface is fully translated to Thai, but Help is in English.
`MasterLabel`	**Type** string **Properties** Filter, Group, Sort, Update **Description** Master label for the audience. This internal name doesn’t get translated.

AuraDefinition

Represents an Aura component definition, such as component markup, a client-side controller, or an event. This object is available in API version 32.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Summer '20 and later, only your Salesforce org's internal users can access this object.

Fields

Field Name	Details
`AuraDefinitionBundleId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the bundle containing the definition. A bundle contains a Lightning definition and all its related resources.
`DefType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The definition type. Valid values are: • `APPLICATION` — Lightning Aura Components app • `CONTROLLER` — client-side controller • `COMPONENT` — component markup • `EVENT` — event definition • `HELPER` — client-side helper • `INTERFACE` — interface definition • `RENDERER` — client-side renderer • `STYLE` — style (CSS) resource • `PROVIDER` — reserved for future use • `MODEL` — deprecated, do not use • `TESTSUITE` — reserved for future use

Field Name	Details
	• `DOCUMENTATION` — documentation markup • `TOKENS` — tokens collection • `DESIGN` — design definition • `SVG` — SVG graphic resource • `MODULE` — reserved for future use
`Format`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The format of the definition. Valid values are: • `XML` for component markup • `JS` for JavaScript code • `CSS` for styles • `TEMPLATE_CSS` reserved for future use • `SVG` for an SVG graphic
`Source`	**Type** textarea **Properties** Create, Update **Description** The contents of the definition. This is all the markup or code for the definition.

Usage

For more information, see the Lightning Aura Components Developer Guide.

AuraDefinitionBundle

Represents a Lightning Aura component definition bundle, such as a component or application bundle. A bundle contains a Lightning Aura component definition and all its related resources. This object is available in API version 32.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
ApiVersion	**Type** double **Properties** Create, Filter, Sort, Update **Description** The API version for this bundle. Every bundle has an API version specified at creation.
Description	**Type** textarea **Properties** Create, Filter, Group, Sort, Update **Description** The text description of the bundle. Maximum size of 255 characters.
DeveloperName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the record in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This field is automatically generated but you can supply your own value if you create the record using the API. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
Language	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the `MasterLabel`.
MasterLabel	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Sort, Update **Description** Master label for the Lightning bundle. This internal label doesn't get translated.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.

Usage

For more information, see the Lightning Aura Components Developer Guide.

AuraDefinitionBundleInfo

For internal use only.

AuraDefinitionInfo

For internal use only.

AuthConfig

Represents authentication options for an org with a My Domain configured, an Experience Cloud site, or a custom domain. This object is available in API version 32.0 and later.

The fields for this object control the options that display on the login page of an org configured with a My Domain, an Experience Cloud site, or custom domain.

- Logging in with a username and password
- Using SAML for single sign-on
- Authentication provider logins from a third-party service, such as Facebook or Twitter

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

You must have “View Setup and Configuration” permission to view the settings.

Fields

Field Name	Details
`AuthOptionsAuthProvider`	**Type** boolean **Properties** Filter **Description** If `true`, at least one Auth. Provider is selected to show up on the login page, and this object has child AuthConfigProvider objects for each provider.
`AuthOptionsCertificate`	**Type** boolean **Properties** Filter **Description** If `true`, certificate-based login displays on the My Domain login page.
`AuthOptionsSaml`	**Type** boolean **Properties** Filter **Description** If `true`, at least one SAML configuration is selected to show up on the login page. If the organization has only one SAML configuration, this value indicates whether that configuration is selected to show up on the login page. If the organization has multiple SAML configurations, see the child AuthConfigProvider objects for each configuration.

Field Name	Details
AuthOptionsUsernamePassword	**Type** boolean **Properties** Filter **Description** If `true`, the login option for a username and password appears on the login page.
DeveloperName	**Type** string **Properties** Filter, Group, Sort **Description** The name of the domain created using My Domain or, for an Experience Cloud site, a concatenated string of *`site name_site prefix`*.
IsActive	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Whether this configuration is in use.
Language	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language for the organization.
MasterLabel	**Type** string **Properties** Filter, Group, Sort **Description** The text that’s used to identify the Visualforce page in Setup.
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
`Type`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The organization type for this object. • `Org` (includes custom domains) • `Community` • `Site` • Portal
`Url`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The login URL of the organization for this AuthConfig object. Each URL has only one associated AuthConfig object.

AuthConfigProviders

Represents an authentication provider that's configured in an organization. This object is a child of the AuthConfig object. This object is available in API version 32.0 and later.

This object links the authentication configuration for an organization to the Auth. Provider through the `AuthOptionsAuthProvider` field of the AuthConfig object. The login page of a Community or My Domain can allow multiple SAML configurations and multiple authentication providers. These configurations can be set to show up as buttons on the login page. Each configuration has an AuthConfigProvider object.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

You must have "View Setup and Configuration" permission to view the settings.

Fields

Field Name	Details
`AuthConfigId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID for this configuration.
`AuthProviderId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the Auth. Provider or SAML configuration.

AuthorizationForm

Represents the specific version and effective dates of a form that is associated with consent, such as a privacy policy or terms and conditions. This object is available in API version 46.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is available if Data Protection and Privacy is enabled.

Fields

Field Name	Details
DefaultAuthFormTextId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Required. The ID of the default authorization form text to use if text isn't available for a specific language.
EffectiveFromDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date when the authorization form takes effect.
EffectiveToDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date when the authorization form is no longer in effect.
IsSignatureRequired	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the authorization form requires a signature.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime

Field Name	Details
	Properties Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, it's possible that this record was referenced (`LastReferencedDate`) and not viewed.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. The name of the authorization form.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the owner of the account associated with this customer.
`RevisionNumber`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The revision number of the authorization form. For example, "rev1.21."

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

AuthorizationFormHistory
History is available for tracked fields of the object.

AuthorizationFormOwnerSharingRule
Sharing rules are available for the object.

AuthorizationFormShare
Sharing is available for the object.

AuthorizationFormConsent

Represents the date and way in which a user consented to an authorization form. This object is available in API version 46.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is available if Data Protection and Privacy is enabled.

Fields

Field Name	Details
`AuthorizationFormTextId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Required. The authorization form text that the Individual consented to.
`ConsentCapturedDateTime`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Required. The date and time that consent was given.
`ConsentCapturedSource`	**Type** string **Properties** Create, Filter, Group, Nillable Sort, Update **Description** Required. The source through which consent was captured. For example, user@example.com, www.example.com.
`ConsentCapturedSourceType`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Required. The source type through which consent was captured. For example, phone, email, or website.

Field Name	Details
ConsentGiverId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Required. The ID of the person consenting to the authorization form.
DocumentVersionId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the document version for which consent is given.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, it’s possible that this record was referenced (LastReferencedDate) and not viewed.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. The name of the authorization form consent.
OwnerId	**Type** reference

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** Required. The ID of the owner of the account associated with this customer.
`RelatedRecordId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of a record showing consent of an authorization form.
`Status`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The status of the authorization form. Possible values are: • `Seen` • `Signed`
`PartyId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** This field was removed in API version 47.0. Use`ConsentGiverId` instead.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

AuthorizationFormConsentHistory
History is available for tracked fields of the object.

AuthorizationFormConsentOwnerSharingRule
Sharing rules are available for the object.

AuthorizationFormConsentShare
Sharing is available for the object.

AuthorizationFormDataUse

Represents the data use consented to in an authorization form. This object is available in API version 46.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is available if Data Protection and Privacy is enabled.

Fields

Field Name	Details
`AuthorizationFormId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Required. The ID of the associated authorization form record.
`DataUsePurposeId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Required. Identifies the data use purpose record associated with the authorization form.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort

Field Name	Details
	Description The timestamp for when the current user last viewed this record. If this value is null, it's possible that this record was referenced (`LastReferencedDate`) and not viewed.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. The name of the authorization form data use.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the owner of the account associated with this customer.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

AuthorizationFormDataUseHistory
History is available for tracked fields of the object.

AuthorizationFormDataUseOwnerSharingRule
Sharing rules are available for the object.

AuthorizationFormDataUseShare
Sharing is available for the object.

AuthorizationFormText

Represents an authorization form's text and language settings. This object is available in API version 46.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is available if Data Protection and Privacy is enabled.

Fields

Field Name	Details
AuthorizationFormId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. The ID of the associated authorization form record.
ContentDocumentId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the ContentDocument that provides the authorization form's text.
FullAuthorizationFormUrl	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The URL where the full text of the authorization form is located.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, it's possible that this record was referenced (LastReferencedDate) and not viewed.
Locale	**Type** picklist

Field Name	Details
	Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The combined language and locale ISO code that control the language of the authorization form text. `Locale` and `LocaleSelection` have the same function. Note: `Locale` can contain custom values not included in the picklist if added before version 47.0.
`LocaleSelection`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The combined language and locale ISO code that control the language of the authorization form text. `Locale` and `LocaleSelection` have the same function.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. The name of the authorization form text.
`SummaryAuthFormText`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A shortened version of the authorization form that is displayed to the user.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

AuthorizationFormTextHistory

History is available for tracked fields of the object.

AuthProvider

Represents an authentication provider (auth provider). An auth provider lets users log in to your Salesforce org from an external service provider, such as Facebook, Google, or GitHub.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Only users with Customize Application and Manage AuthProviders permissions can access this object.

Fields

Field Name	Details
`AppleTeam`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Required when using Apple as a third-party authentication provider. A 10-character team ID, obtained from an Apple developer account. Available in API version 48.0 and later.
`AuthorizeUrl`	**Type** url **Properties** Create, Filter, Nillable, Sort, Update **Description** Required when creating an OpenID Connect authentication provider. The OAuth authorization endpoint URL. Available in API version 29.0 and later. In API version 33.0 and later, for Salesforce-managed auth providers, leave the field blank to let Salesforce supply and manage the value.
`ConsumerKey`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** The app's key that is registered at the third-party (external) authentication provider. In API version 33.0 and later, for Salesforce-managed auth providers, leave the field blank to let Salesforce supply and manage the value.

Field Name	Details
ConsumerSecret	**Type** string **Properties** Create, Nillable **Description** The consumer secret of the authentication provider that is registered at the third-party SSO provider. It's used by the consumer for identification to Salesforce. In API version 33.0 and later, for Salesforce-managed auth providers, leave the field blank to let Salesforce supply and manage the value. You can create your own consumer secret on `create()`. However, after you set it, you can't change the value.
CustomMetadataTypeRecord	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Required when creating a custom authentication provider plug-in. The API name of the custom authentication provider. Available in API version 36.0 and later.
DefaultScopes	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** For OpenID Connect authentication providers, the scopes to send with the authorization request, if not specified when a flow starts. Available in API version 29.0 and later. In API version 33.0 and later, for Salesforce-managed auth providers, leave the field blank to let Salesforce supply and manage the value.
DeveloperName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. Used when referring to the authentication provider from a program.
EcKey	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description Required when using Apple as a third-party authentication provider. Available in API version 48.0 and later.
ErrorUrl	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** A custom error URL for the authentication provider to use to report errors.
ExecutionUserId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Required when specifying a registration handler class. The username of the Salesforce admin or system user who runs the Apex handler, which provides the context in which the Apex handler runs. For example, if the Apex handler creates a contact, the creation can be easily traced back to the registration process. In production, use a system user. The user must have the Manage Users permission. Available in API version 27.0 and later.
FriendlyName	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. A user-friendly name for the authentication provider.
IconUrl	**Type** url **Properties** Create, Filter, Nillable, Sort, Update **Description** The path to an icon to use as a button on the login page. Users click the button to log in with the associated authentication provider, such as Twitter or Facebook. Available in API version 32.0 and later.
IdTokenIssuer	**Type** string

Field Name	Details
	Properties Create, Filter, Nillable, Sort, Update **Description** Available when configuring an OpenID Connect authentication provider, the source of the authentication token in https: URI format. If provided, Salesforce validates the returned `id_token` value. OpenID Connect requires returning an `id_token` value with the `access_token` value. Available in API version 30.0 and later.
`LinkKickoffUrl`	**Type** url **Properties** Nillable **Description** The URL for linking existing Salesforce users to a third-party account. This field is read-only. Available in API version 43.0 and later.
`LogoutUrl`	**Type** url **Properties** Create, Filter, Nillable, Sort, Update **Description** The destination for users after they log out if they authenticated using single sign-on. The URL must be fully qualified with an http or https prefix, such as `https://acme.my.salesforce.com`. Available in API version 33.0 and later.
`OauthKickoffUrl`	**Type** url **Properties** Nillable **Description** The URL for obtaining OAuth access tokens for a third party. This field is read-only. Available in API version 43.0 and later.
`OptionsIncludeOrgIdInId`	**Type** boolean **Properties** Create, Filter, Update **Description** Used to differentiate between users with the same user ID from two sources (such as two sandboxes). If enabled (`true`), Salesforce stores the org ID of the

Field Name	Details
	third-party identity in addition to the user ID. After you enable this setting, you can't disable it. Applies only to a Salesforce-managed auth provider. Available in API version 32.0 and later.
`OptionsSendAccessTokenInHeader`	**Type** boolean **Properties** Create, Filter, Update **Description** If enabled (`true`), the access token is sent to the `UserInfoUrl` in a header instead of a query string. Available in API version 30.0 and later.
`OptionsSendClientCredentialsInHeader`	**Type** boolean **Properties** Create, Filter, Update **Description** Required when creating an OpenID Connect authentication provider. If enabled (`true`), the client credentials are sent in a header to the `tokenUrl` instead of a query string. The credentials are in the standard OpenID Connect Basic Credentials header format, which is `Basic <token>`, where `<token>` is the base64-encoded string `"clientkey:clientsecret"`. Available in API version 30.0 and later.
`OptionsSendSecretInApis`	**Type** boolean **Properties** Create, Filter, Update **Description** Determines whether the encrypted consumer secret appears in API responses. If enabled (default), the secret appears in the response. If disabled (`false`), responses don't include the consumer secret. For security, you can disable the setting. However, keep in mind that: • By disabling this setting, the consumer secret is excluded from API responses in all API versions. • Change sets and other metadata deployments break because both the consumer key and secret are expected. To fix this problem, insert the consumer key manually during deployment. Available in API version 47.0 and later.
`PluginId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** An existing Apex class that extends the `Auth.AuthProviderPluginClass` abstract class. Available in API version 39.0 and later.
`ProviderType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. The third-party authentication provider to use. Valid values include: • `Apple`. Available in API version 48.0 and later. • `Facebook`. • `Salesforce`. • `Janrain`. • `LinkedIn`. Available in API version 32.0 and later. • `Twitter`. Available in API version 32.0 and later. • `OpenIdConnect`. Available in API version 29.0 and later. • `MicrosoftACS`—Microsoft Access Control Service provides authentication for a Microsoft Office 365 service, like SharePoint Online. Available in API version 31.0 and later. • `GitHub`—Provides authentication for a `GitHub` provider. Used to log in users of your Lightning Platform app to GitHub using OAuth. When logged in to GitHub, your app can make calls to GitHub APIs. The `GitHub` provider isn't available as an SSO provider, so users can't log in to your Salesforce org using their GitHub login credentials. Available in API version 35.0 and later. • `Custom`—A provider configured with a custom authentication provider plug-in. Available in API version 36.0 and later.
`RegistrationHandlerId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An existing Apex class that implements the `Auth.RegistrationHandler` interface.
`SsoKickoffUrl`	**Type** url

Field Name	Details
	Properties Nillable **Description** The URL for performing SSO into Salesforce from a third party by using its third-party credentials. This field is read-only. Available in API version 43.0 and later.
`TokenUrl`	**Type** url **Properties** Create, Filter, Nillable, Sort, Update **Description** The OAuth token endpoint URL of an OpenID Connect authentication provider. Available in API version 29.0 and later. In API version 33.0 and later, for Salesforce-managed auth providers, leave the field blank to let Salesforce supply and manage the value.
`UserInfoUrl`	**Type** url **Properties** Create, Filter, Nillable, Sort, Update **Description** The OpenID Connect endpoint URL of the OpenID Connect authentication provider. Available in API version 29.0 and later. In API version 33.0 and later, for Salesforce-managed auth providers, leave the field blank to let Salesforce supply and manage the value.

AuthSession

The AuthSession object represents an individual user session in your organization. This object is available in versions 29.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`CreatedDate`	**Type** dateTime

Field Name	Details
	Properties Defaulted on create, Filter, Sort **Description** The date and time this session was created. This field is a standard system field.
`Id`	**Type** id **Properties** Defaulted on create, Filter, Group, ID Lookup, Sort **Description** The current session's ID.
`IsCurrent`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, the session is a member of the user's current session family. This field is available in API version 37.0 and later.
`LastModifiedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** The date and time this session was last updated. A session expires when the current date and time equals `LastModifiedDate` + `NumSecondsValid`. This field is a standard system field.
`LoginGeoId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The 18-character ID for the record of the geographic location of the user for a login event. Due to the nature of geolocation technology, the accuracy of geolocation fields (for example, country, city, postal code) can vary. This field is available in API version 34.0 and later.
`LoginHistoryId`	**Type** reference

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The 18-character ID for a successful login event. When a session is reused, Salesforce updates the `LoginHistoryId` with the value from the most recent login. This field is available in API version 33.0 and later.
`LoginType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of login used to access the session. Possible values are: • `AJAX Toolkit` • `Apex Office Toolkit` • `AppExchange` • `Application` • `AppStore` • `Certificate-based login` • `Chatter Communities Eternal User Third Party SSO` • `Chatter Communities External User` • `Community` • `Customer Service Portal Third-Party SSO` • `Customer Service Portal` • `DataJunction` • `DB Replication` • `Employee Login to Community` • `Excel Integration` • `Help and Training` • `HOTP YubiKey` • `Lightning Login` • `Networks Portal API Only` • `Offline Client` • `Order Center` • `Other Apex API` • `Outlook Integration` • `Partner Portal Third-Party SSO` • `Partner Portal` • `Partner Product`

Field Name	Details
	• `Passwordless Login` • `Remote Access 2.0` • `Remote Access Client` • `Sales Anywhere` • `Salesforce Outlook Integration` • `Salesforce.com Website` • `SAML Chatter Communities External User SSO` • `SAML Customer Service Portal SSO` • `SAML Idp Initiated SSO` • `SAML Partner Portal SSO` • `SAML Sfdc Initiated SSO` • `SAML Site SSO` • `Self-Service` • `Signup` • `Sync` • `SysAdmin Switch` • `Third Party SSO` • `Validate`
`LogoutUrl`	**Type** string **Properties** Filter, Nillable, Sort **Description** The page or view to display after users log out of an Experience Cloud site, or an org if they authenticated using SAML. This field is available in API version 32.0 and later.
`NumSecondsValid`	**Type** int **Properties** Filter, Group, Sort **Description** The number of seconds before the session expires, starting from the last update time.
`ParentId`	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The 18-character ID for the parent session, if one exists (for example, if the current session is for a canvas app). If the current session doesn't have a parent, this value is the current session's own ID.
`SessionSecurityLevel`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Standard or High, depending upon the authentication method used.
`SessionType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of session. Common ones are UI, Content, API, and Visualforce.
`SourceIp`	**Type** string **Properties** Filter, Group, Sort **Description** IP address of the end user's device from which the session started. This address can be an IPv4 or IPv6 address.
`UserType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The kind of user for this session. Types include Standard, Partner, Customer Portal Manager, High Volume Portal, and CSN Only.
`UsersId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The user's Salesforce user ID.

Usage

The AuthSession object exposes session data and enables read and delete operations on that data. For example, use this object to create a report showing who is signed in to your organization. Or you can use this object to create a tool to delete a session, ending that user's session. For a user, only their own sessions are available, while administrators can see all sessions.

You can't change user sessions with this object. You can only read and delete them.

BackgroundOperation

Represents a background operation in an asynchronous job queue. This object is available in API version 35.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Error`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The error message for the operation. Applies only if the operation has an error status.
`ExecutionGroup`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Applies only if the operation is merged with other operations into an execution group to be processed in bulk. Identifies the execution group.
`ExpiresAt`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** After this time, the operation is removed from the asynchronous job queue. Applies only if the operation has a status of complete, canceled, error, or merged.

Field Name	Details
`FinishedAt`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** When the operation reached the status of completed or error.
`GroupLeaderId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Applies only if the operation is merged with other operations into an execution group to be processed in bulk. Identifies the operation that's selected as the leader of the execution group.
`Name`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** Identifies the background operation.
`NumFollowers`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Applies only if the operation is merged with other operations into an execution group to be processed in bulk. Number of other operations that are in the execution group.
`ParentKey`	**Type** string **Properties** Filter, Group, idLookup, Nillable, Sort **Description** Tag that identifies related sets of operations, if any.
`ProcessAfter`	**Type** dateTime

Field Name	Details
	Properties Filter, Nillable, Sort **Description** The operation is scheduled to be processed after this time.
`RetryBackoff`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Applies only if the operation has an error status. The first retry is attempted immediately. Each subsequent retry is increasingly delayed according to an exponential expression that's multiplied by the `RetryBackoff`, in milliseconds. Specifically, the delay time is $(2^{n}-1)\times R$, where `n` is the `RetryCount`, and `R` is the `RetryBackoff`. The default value for `RetryBackoff` depends on the type of operation. For example, the `RetryBackoff` default for write operations on external objects is 1,000 milliseconds. For write operations, retries are attempted immediately, after 3 seconds, after 7 seconds, after 15 seconds, and so on.
`RetryCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Number of attempted retries. Applies only if the operation has an error status.
`RetryLimit`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Maximum number of retries to attempt. Applies only if the operation has an error status.
`SequenceGroup`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description Identifies the sequence group. Applies only if the operation is merged with other operations into an execution group to be processed in bulk. Within an execution group, operations can be placed into a sequence group to be executed in a specific order.
SequenceNumber	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Order position within the sequence group. Applies only if the operation is merged with other operations into an execution group to be processed in bulk. Within an execution group, operations can be placed into a sequence group to be executed in a specific order.
StartedAt	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** When the operation started running.
Status	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Status of the background operation. The options are: • New • Scheduled • Canceled • Merged • Waiting • Running • Error • Complete
SubmittedAt	**Type** dateTime

Field Name	Details
	Properties Filter, Nillable, Sort **Description** When the operation was added to the job queue.
`Timeout`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Maximum time in milliseconds to wait for results after the operation started running.
`WorkerUri`	**Type** string **Properties** Filter, Group, idLookup, Nillable, Sort **Description** URI of the worker that performed the operation. Example for a Salesforce Connect OData operation: `services/data/v35.0/xds/upsert`

Usage

The BackgroundOperation object lets you:

- Monitor the job status of asynchronous operations.
- View errors that are related to the asynchronous operations.
- Extract statistics for the asynchronous job queue.

BackgroundOperationResult

Stores error messages generated when running Async SOQL queries or importing data into big objects using Bulk API. This is a big object, available in API version 37.0 and later.

Each instance of `BackgroundOperationResult` represents one error. The `Message` field stores the text of the error message. The `ParentID` field stores the:

- job ID of the query, in case of Async SOQL
- batch ID for the data import, in case of Bulk API

Bulk API validates data at the time of import, and generates an error message for the first occurrence of invalid data in any row of the data file. The validation performed depends on the type of data being imported.

- **Text**—The length of the input string must be less than or equal to the length of the corresponding text field in the target object.
- **Number**—The input data must be a number, whose scale and precision are compatible with the corresponding number field in the target object.
- **ID—**The input data must be a valid 15- or 18-character ID.
- **DateTime**—The input data must be a valid dateTime value, in the approved format.
- **Lookup**—The lookup value must be a valid 15- or 18-character ID.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field Name	Details
`CreatedById`	**Type** ID **Properties** Nillable **Description** The user ID of the user initiating the Bulk API or Async SOQL request.
`CreatedDate`	**Type** dateTime **Properties** Defaulted on create **Description** The date and time at which the Bulk API or Async SOQL request was made.
`Data`	**Type** string **Properties** Nillable **Description** The data that generated the error message. The total length is limited to 2,000 characters, and each column can occupy a maximum of 50 characters. Any data exceeding those limits is truncated.
`Id`	**Type** ID **Properties** Defaulted on create, idLookup

Field Name	Details
	Description The ID of the error message.
`Message`	**Type** string **Properties** Nillable **Description** The text of the error message.
`MessageType`	**Type** picklist **Properties** Nillable, Restricted picklist **Description** The type of error message. The possible values are: ERROR, WARNING, or INFO.
`ParentId`	**Type** reference **Properties** Filter, Sort **Description** The batch ID, in case of Bulk API, or the job ID, in case of Async SOQL.

Usage

You can check for errors by querying the `BackgroundOperationResult` object. For example, this query returns details of all errors in a data file imported using Bulk API, whose batch ID is `751xx000000006OAAQ`.

```
SELECT CreatedbyId, CreatedDate, Id, Message, MessageType, ParentId FROM
BackgroundOperationResult WHERE ParentId = “751xx000000006OAAQ”
```

Note: You can only view errors resulting from Async SOQL or Bulk API requests that you initiated, unless you have the global permission to view all data.

BatchApexErrorEvent

The documentation has moved to BatchApexErrorEvent in the *Platform Events Developer Guide*.

Bookmark

Represents a link between opportunities that share common information.

This object is available to organizations with the Similar Opportunities feature enabled.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`ID`	**Type** ID **Properties** Defaulted on create, Filter **Description** ID of the bookmark. Label is **Bookmark ID**.
`FromId`	**Type** ID **Properties** Filter **Description** The originating opportunity. Label is **Bookmarked From ID**
`ToId`	**Type** ID **Properties** Filter **Description** The opportunity to which the originating opportunity is linked. Label is **Bookmarked To ID**.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.

Usage

The Bookmark object works with the Opportunity object only.

Use this read-only object to query the bookmarks between opportunities in your organization. In the online application, users can search for opportunities that share attributes with their opportunity. The user can then bookmark the appropriate opportunities for future reference.

BrandTemplate

Letterhead for HTML EmailTemplate.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`Description`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the letterhead. Limited to 1000 characters.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is **Letterhead Unique Name**. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.

Field	Details
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the letterhead is available for use (`true`) or not (`false`). Label is **Active**.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Label of the template as it appears in the user interface. Limited to 255 characters. Label is **Brand Template Name**.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
`Value`	**Type** textarea **Properties** Create, Update **Description** The contents of the letterhead, in HTML, including any logos.

Usage

Use this object to brand EmailTemplate records with your letterhead. You can also set a brand template to active or inactive. For example, if you have five different marketing brands, you can maintain each different brand in one template, and assign to the appropriate EmailTemplate.

SEE ALSO:

EmailTemplate

BriefcaseAssignment

Represents the assignment of a briefcase definition to selected users and user groups. This object is available in API version 50.0 and later.

Use this object to assign selected records for users and groups to view offline. Briefcase objects are available in orgs that have Briefcase Builder and Field Service enabled.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`BriefcaseId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the briefcase definition. Label is **Briefcase Definition ID**.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the user or group requiring access to the briefcase. Label is **User or Group ID**.

BriefcaseDefinition

Represents a briefcase definition. A briefcase makes selected records available for users to view when they're offline in the Salesforce Field Service mobile app for iOS and Android. This object is available in API version 50.0 and later.

Briefcase objects are available in orgs that have Briefcase Builder and Field Service enabled.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Packaging Considerations

An org can have up to 5 briefcases. Installed briefcases are counted against this limit. You can't install a package that includes a briefcase if your org already has 5 briefcases. When a managed package includes a briefcase, the only changes allowed for the briefcase are activating or deactivating and assigning users or groups to the briefcase.

Fields

Field	Details
`Description`	**Type** textarea **Properties** Filter, Nillable, Sort **Description** Description of the briefcase definition. Limited to 1024 characters.
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Limited to 80 characters. Label is **Name**.
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the briefcase is available for use (`true`) or not (`false`). Label is **Active**.
`Language`	**Type** picklist

Field	Details
	Properties Filter, Group, Restricted picklist, Sort **Description** The language for the briefcase. This field defaults to the user's language unless the org is multi-language enabled. Specifies the language of the labels returned. Possible values are: • Chinese (Simplified): `zh_CN` • Chinese (Traditional): `zh_TW` • Danish: `da` • Dutch: `nl_NL` • English: `en_US` • Finnish: `fi` • French: `fr` • German: `de` • Italian: `it` • Japanese: `ja` • Korean: `ko` • Norwegian: `no` • Portuguese (Brazil): `pt_BR` • Russian: `ru` • Spanish: `es` • Spanish (Mexico): `es_MX` Spanish (Mexico) defaults to Spanish for customer-defined translations. • Swedish: `sv` • Thai: `th` The Salesforce user interface is fully translated to Thai, but Help is in English.
`MasterLabel`	**Type** string **Properties** Filter, Group, Sort **Description** The master label for the briefcase. This internal label doesn’t get translated. Limited to 80 characters.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.

Usage

Use this object to query a briefcase or a list of briefcases with selected records and user assignments. For example:

```
SELECT Id, Description FROM BriefcaseDefinition
WHERE Id in (SELECT BriefcaseId FROM BriefcaseRule
WHERE TargetEntity='Account')
AND Id in (SELECT BriefcaseId FROM BriefcaseAssignment where
UserOrGroupId='00GR0000000VtwUMAS')
```

BriefcaseRule

Represents a rule that specifies records for a briefcase definition. This object is available in API version 50.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`BriefcaseId`	**Type** reference **Properties** Filter, Group, Sort

Field	Details
	Description Required. ID of the briefcase definition. Label is **Briefcase Definition ID**.
`FilterLogic`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The filter logic for record selection, for example, `1 AND 2` where 1 and 2 correspond to filter 1 and filter 2. Filter logic operators include `AND` and `OR`. Limited to 255 characters. Label is **Filter Logic**.
`IsAscendingOrder`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Required. Indicates whether the records should be sorted in ascending order. Label is **Ascending**.
`OrderBy`	**Type** picklist **Properties** Nillable, Restricted picklist **Description** The field to order the records by, which determines how the records can be sorted. For example, `AccountName` or `CreatedBy`. Label is **Order By**.
`QueryScope`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Required. A group of records to restrict the scope of this rule. Possible values are: • `assignedToMe` • `everything` The default value is `everything` (All Records). The value `assignedToMe` is available only for the `ServiceAppointment` object.
`RecordLimit`	**Type** int

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** The record limit for the object. The recommended number for record limit is up to 500 records per object for optimal performance. The maximum number is 2000. Label is **Limit**.
`TargetEntity`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The standard or custom object that the briefcase rule evaluates. Label is **Target Object**.

BriefcaseRuleFilter

Represents a filter criteria for a briefcase rule. This object is available in API version 50.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`BriefcaseRuleId`	**Type** reference **Properties** Filter, Group, Sort **Description** Required. ID of the briefcase rule.
`FilterOperator`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Required. The comparison operator for this rule filter. Possible values are: • `d`—Ends with

Field	Details
	• `e`— Equals • `g`—Greater than • `h`—Greater than or equal • `i`—Like • `l`—Less than • `m`—Less than or equal • `s`—Starts with
`FilterSeqNumber`	**Type** int **Properties** Filter, Group, Sort **Description** Required. The filter number. When you apply multiple filters, the filters are numbered sequentially, 1, 2, 3, and so on.
`FilterValue`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The value for the field and criteria. For example, `true` or `false` for a boolean field whose criteria or filter operator is Equals. Capitalization matters with date filter operators. Be sure to specify date literals in uppercase. Some valid date literals include TODAY, YESTERDAY and TOMORROW.
`TargetEntityField`	**Type** picklist **Properties** Restricted picklist **Description** Required. The field to filter by. Compound fields and encrypted fields aren't supported. Label is **Field**.

BusinessHours

Specifies the business hours of your support organization. Escalation rules are run only during these hours.

If business hours are associated with any Holiday records, then business hours and escalation rules associated with business hours are suspended during the dates and times specified as holidays.

Supported Calls

`create()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

All users, even those without the “View Setup and Configuration” user permission, can view business hours via the API.

Fields

Field	Details
`BusinessHoursId`	**Type** reference **Properties** Filter, Group, Nillable,Sort **Description** ID of the BusinessHours associated with the SlaProcess.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the business hours is active (`true`) or not active (`false`).
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the business hours.
`IsDefault`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the business hours are set as the default business hours (`true`) or not (`false`).
`LastViewedDate`	**Type** dateTime

Field	Details
	Properties Filter, Nillable, Sort **Description** The date when the business hours were last viewed.
`FridayEndTime`	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** Time that business closes.
`FridayStartTime`	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** Time that business opens.
`MondayEndTime`	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** Time that business closes.
`MondayStartTime`	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** Time that business opens.
`SaturdayEndTime`	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** Time that business closes.
`SaturdayStartTime`	**Type** time

Field	Details
	Properties Create, Filter, Nillable, Sort, Update **Description** Time that business opens.
`SundayEndTime`	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** Time that business closes.
`SundayStartTime`	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** Time that business opens.
`ThursdayEndTime`	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** Time that business closes.
`ThursdayStartTime`	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** Time that business opens.
`TimeZoneSidKey`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The time zone of the business hours.
`TuesdayEndTime`	**Type** time

Field	Details
	Properties Create, Filter, Nillable, Sort, Update **Description** Time that business closes.
TuesdayStartTime	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** Time that business opens.
WednesdayEndTime	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** Time that business closes.
WednesdayStartTime	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** Time that business opens.

Usage

Use this object to specify the business hours at which your support team operates. Escalation rules only run during the business hours with which they are associated. To set business hours to 24-hours a day, set the times from midnight to midnight (00:00:00 ~ 00:00:00) on each day.

By default, business hours are set from 12:00 AM to 12:00 AM in the default time zone specified in your organization's profile.

SEE ALSO:

Object Basics

BusinessProcess

Represents a business process.

Supported Calls

`create()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`Description`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of this business process. Limit: 255 characters.
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this business process can be presented to users in the Salesforce user interface (`true`) or not (`false`) when creating a new record type or changing the business process of an existing record type.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. Name of this business process. Limit: 80 characters.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation.

Field	Details
	The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
`TableEnumOrId`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** Required. One of the following values: Case, Opportunity, or Solution. Label is **Entity Enumeration Or ID**.

Usage

Use the BusinessProcess object to offer different subsets of picklist values to different users for the LeadStatus, CaseStatus, and OpportunityStage fields. Similar to a RecordType, a BusinessProcess identifies the type of a row in a Case, Lead, or Opportunity and implies a subset of picklist values for these three fields. The values for the remaining picklist fields are driven by RecordType.

SEE ALSO:

Object Basics

BusinessProcessDefinition

Setup object that stores information about stages in a customer lifecycle map. The stages are associated with surveys and questions created using Salesforce Surveys. This object is reserved for internal use, and is available in API version 49.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`BusinessProcessGroupId`	**Type** reference

Field	Details
	Properties Filter, Group, Sort **Description** Unique identifier of the customer lifecycle map associated with the stage.
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** Developer name of the stage.
`Language`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language of the MasterLabel. Possible values are: • `da`—Danish • `de`—German • `en_US`—English • `es`—Spanish • `es_MX`—Spanish (Mexico) • `fi`—Finnish • `fr`—French • `it`—Italian • `ja`—Japanese • `ko`—Korean • `nl_NL`—Dutch • `no`—Norwegian • `pt_BR`—Portuguese (Brazil) • `ru`—Russian • `sv`—Swedish • `th`—Thai • `zh_CN`—Chinese (Simplified) • `zh_TW`—Chinese (Traditional)
`MasterLabel`	**Type** string

Field	Details
	Properties Filter, Group, Sort **Description** Label of the stage.
`ProcessDescription`	**Type** textarea **Properties** Nillable **Description** Description of the stage.
`SequenceNumber`	**Type** int **Properties** Filter, Group, Sort **Description** The position of the stage in the associated customer lifecycle map.

BusinessProcessFeedback

Setup object that stores information about the survey and the question associated with each stage in a customer lifecycle map. Customer lifecycle maps are used to track the scores provided by customers across their lifecycle using Salesforce Surveys. This object is reserved for internal use, and is available in API version 49.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`ActionName`	**Type** string **Properties** Filter, Group, Sort **Description** Name of the survey used to gather feedback.

Field	Details
ActionParam	**Type** string **Properties** Filter, Group, Sort **Description** Name of the question used to gather feedback.
ActionType	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Method of collecting feedback. Possible value is: • SURVEY—Survey
BusinessProcessDefinitionId	**Type** reference **Properties** Filter, Group, Sort **Description** Unique identifier of the stage associated with the survey and question.

BusinessProcessGroup

Setup object that stores information about customer lifecycle maps. Customer lifecycle maps are used to track the scores provided by customers across their lifecycle using Salesforce Surveys. This object is reserved for internal use, and is available in API version 49.0 and later.

Supported Calls

describeSObjects(), query(), retrieve()

Fields

Field	Details
CustomerSatisfactionMetric	**Type** picklist

Field	Details
	Properties Filter, Group, Restricted picklist, Sort **Description** Represents the question type that measures the customers' Net Promote Score or satisfaction score across their lifecycle. Possible values are: • `NPS` • `Rating`
`Description`	**Type** textarea **Properties** Nillable **Description** Description of the customer lifecycle map.
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** Developer name the customer lifecycle map.
`Language`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language of the MasterLabel. Possible values are: • `da`—Danish • `de`—German • `en_US`—English • `es`—Spanish • `es_MX`—Spanish (Mexico) • `fi`—Finnish • `fr`—French • `it`—Italian • `ja`—Japanese • `ko`—Korean

Field	Details
	• nl_NL—Dutch • no—Norwegian • pt_BR—Portuguese (Brazil) • ru—Russian • sv—Swedish • th—Thai • zh_CN—Chinese (Simplified) • zh_TW—Chinese (Traditional)
MasterLabel	**Type** string **Properties** Filter, Group, Sort **Description** Label of the customer lifecycle map.

BuyerGroupPricebook

Represents a buyer group price book used in Lightning B2B Commerce. This object is available in API version 48.0 and later.

Supported Calls

create(), delete(), describeLayout(), describeSObjects(), getDeleted(), getUpdated(), query(), retrieve(), search(), undelete(), update(), upsert()

Special Access Rules

The BuyerGroupPricebook object is available only if the B2B Commerce on Lightning Experience license is enabled.

Fields

Field	Details
BuyerGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the buyer group that the price book record is assigned to.

Field	Details
IsActive	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Determines whether the BuyerGroupPricebook is active (`true`) or not (`false`). Default value is `false`.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, it's possible that this record was referenced (`LastReferencedDate`) and not viewed.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name of the Buyer Group Price Book record.
Pricebook2Id	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the price book assigned to the buyer group.
Priority	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description The sequential priority used to determine the price of a product. This field is only available for web stores that use the **Priority** pricing strategy.

Usage

Use the BuyerGroupPricebook object to assign a price book to a set of buyer users. Assigning a price book to a buyer group allows buyers within that buyer group to retrieve product prices from the price book. When a buyer has multiple price book assignments, including multiple prices for the same product, the store Pricing Strategy determines the price.

Limits

The are organization limits on Buyer Group Price Book records, price books that you can associate to a given buyer group, and buyer groups that you can associate to a given price book.

- Maximum **total** number of Buyer Group Price Book records: 5,000
- Maximum number of price books associated to a given buyer group: 50
- Maximum number of buyer groups associated to a given price book: 100

Calendar

Represents a calendar. This can be a default user calendar, public calendar, resource calendar, or holiday calendar. This object is available in API version 45.0 and later.

Newly created users are assigned a default calendar automatically. Similarly, holiday calendars are created automatically for each organization.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`, `search()`

Special Access Rules

Users with "View Setup and Configuration" user permissions can create, edit, and delete public and resource calendars in the user interface. All users, even those without the “View Setup and Configuration” user permission, can view calendars via the API.

Fields

All fields are readable only.

Field	Details
`IsActive`	**Type** boolean

Field	Details
	Properties Defaulted on create, Filter, Group, Sort **Description** This field indicates whether a user can save events to the calendar.
`Name`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** A user provided name that identifies the calendar. It is text-indexed for searchability. Note that this is not an enumerated field; it can be any string to a maximum length of 80 characters.
`Type`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of the calendar. Possible values are: • `Holiday` (Holiday Calendar) • `Public` (Public Calendar) • `Resource` (Resource Calendar) • `User` (User Calendar)
`UserId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the user that owns that calendar record. If Type=User, there's a UserID associated (foreign key reference to the user). Otherwise, the user field is null.

CalendarView

These calendars can be created and assigned to users other than the creator. Available calendars include object, shared, public, resource, and user list calendars. Object calendars represent a calendar based on a Salesforce object, either standard or custom. This object is available in API version 51.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

All fields and entities referenced by field values must be accessible by the CalendarView creator even if the creator isn't the CalendarView owner.

Fields

Field	Details
`Color`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** Represents the color used in the background for records displayed in a user's calendar view within the user interface.
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization.
`DateHandlingType`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Determined by the data type of the `StartField`. Valid values include: • `Date` • `Datetime`
`DisplayField`	**Type** string **Properties** Create, Filter, Group, Sort, Update

Field	Details
	Description Represents the `SobjectType` field used as the subject for records displayed in a user's calendar view within the user interface.
`EndField`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An optional field that represents the sObjectType field used as the end time for records displayed in a user's calendar view within the user interface. Must be a date or dateTime field that matches the type in `StartField`.
`FillPattern`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Represents the pattern displayed as the background for records displayed in a user's calendar view within the user interface. Valid values include: • `verticalStripes` • `ascDiagonalStripes` • `descDiagonalStripes`
`IsDisplayed`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Defines whether users can see a calendar's records in their calendar view in the user interface. When `true`, records are visible in the user's calendar view. When `false`, records are hidden from the user's calendar view. The default is `true`.
`ListViewFilterId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** References the ListView used to filter records represented by the CalendarView. ListView must have the same sObjectType. If no `ListViewFilterId` is defined, the calendar displays only records with the same owner as the CalendarView.

Field	Details
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** A user-provided name that identifies the calendar. This isn't an enumerated field; it can be any string to a maximum length of 80 characters.
OwnerId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Represents the owner of the CalendarView.
PublisherId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Represents the user, user list, public, or resource calendar from where event data is populated.
SobjectType	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The type of standard or custom Salesforce object that is used to create records for the CalendarView. Use the API name of the desired `SobjectType`.
StartField	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Represents the `SobjectType` field used as the start time for records displayed in a user's calendar view within the user interface. Must be a date or dateTime field type.

Usage

To distribute a CalendarView to multiple users, IDs can be pulled from a group, user list, or profile. For this example, a CalendarView based on opportunity close dates is being distributed to a sales team in a public group, Sales Group:

```
Group userGroup = [SELECT Id FROM Group WHERE Name = 'Sales Group' LIMIT 1];
List<Id> groupId = new List<Id>();
groupId.add(userGroup.id);
List<GroupMember> groupMembers = [SELECT UserOrGroupId FROM GroupMember
   WHERE GroupId IN: groupId];

List<CalendarView> calendarViews = new List<CalendarView>();
for (GroupMember groupMember : groupMembers) {
   CalendarView calendarView = new CalendarView(name = 'Opportunity Close
    Dates', SobjectType = 'Opportunity', StartField = 'CloseDate', DisplayField =
    'Name', OwnerId = groupMember.UserOrGroupId);
   calendarViews.add(calendarView);
}
insert calendarViews;
```

CallCenter

Represents a call center, which is a logical representation of a single computer-telephony integration (CTI) system instance in an organization.

Supported Calls

`create()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`AdapterUrl`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** An optional field that specifies the location of where the CTI adapter is hosted. For example, `http://localhost:11000`. This field is available in API version 23.0 or later.

Field	Details
CustomSettings	**Type** string **Properties** Create, Filter, Nillable, Sort **Description** Specifies settings in the call center definition file, such as whether the call center uses the Open CTI, and SoftPhone properties, such as height in pixels. This field is available for Open CTI and in API version 25.0 or later.
Id	**Type** ID **Properties** Defaulted on create, Filter **Description** System field that uniquely identifies this call center. Label is **Call Center ID**. This ID is created automatically when the call center is created.
InternalName	**Type** string **Properties** Create, Filter, Group, Sort **Description** The internal name of the call center. Limit is 80 characters.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort **Description** The name of the call center. Limit is 80 characters.
Version	**Type** double **Properties** Create, Filter, Nillable, Sort **Description** The version of the CTI Toolkit used to create the call center (for versions 2.0 and later). This field is available in API version 18.0 and later.

Usage

Create a call center or query an existing call center.

CallCoachConfigModifyEvent

Represents a Conversation Insights configuration change. This object is available in API version 49.0 and later.

Supported Calls

`create()`, `describeSObjects()`

Fields

Field	Details
`ChangeType`	**Type** picklist **Properties** Create, Restricted picklist **Description** The type of configuration change made. Possible values are: • `FEATURE` • `OTHER` • `PROVIDER` • `USER`
`OrganizationId`	**Type** string **Properties** Create **Description** The ID of the Salesforce org with the related change.
`ProviderIdChange`	**Type** string **Properties** Create, Nillable **Description** The ID of the provider related to the change.

Field	Details
`ReplayId`	**Type** string **Properties** Nillable **Description** The ID of the related event as it is positioned in the event stream.

CallCoachingMediaProvider

Represents the media provider for call recordings. This object is available in API version 49.0 and later.

Supported Calls

`create()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Whether the connection with the provider is active or not.
`ProviderDescription`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The description of the media provider.
`ProviderName`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort **Description** The name of the media provider.

CallDisposition

Represents a call result value that sales reps select when logging a call. This object is available in API version 47.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

As of Spring '20 and later, only your Salesforce org's internal users can access this object.

Fields

Field	Details
`Disposition`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The result of a phone call, such as whether a call was connected or the rep left a voicemail.
`DispositionCategoryId`	**Type** reference **Properties** Filter, Group, Sort **Description** The related call outcome that is used in reports and branching criteria for sales cadences.

CallDispositionCategory

Represents the call outcome of a phone call that is used in reports and branching criteria for sales cadences. This object is available in API version 47.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

As of Spring '20 and later, only your Salesforce org's internal users can access this object.

Fields

Field	Details
`Category`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The name of the call outcome.
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization.
`Language`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language of the call category. Possible values are: • `da`—Danish • `de`—German • `en_US`—English • `es`—Spanish • `es_MX`—Spanish (Mexico) • `fi`—Finnish • `fr`—French • `it`—Italian • `ja`—Japanese • `ko`—Korean • `nl_NL`—Dutch • `no`—Norwegian

Field	Details
	• `pt_BR`—Portuguese (Brazil) • `ru`—Russian • `sv`—Swedish • `th`—Thai • `zh_CN`—Chinese (Simplified) • `zh_TW`—Chinese (Traditional)
`MasterLabel`	**Type** string **Properties** Filter, Group, Sort **Description** The static name of the call outcome.

CallTemplate

Represents a call script for users to read when making calls.

Supported Calls

`describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`Description`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The description of the call script.
`HtmlBody`	**Type** textarea **Properties** Nillable **Description** The body content of the call script.

Field	Details
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed a record that is related to this CallTemplate.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed this CallTemplate. If this value is null, this record might have been only referenced (LastReferencedDate) and not viewed.
Name	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The name of the call script.
OwnerId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the user who owns the call script.
TemplateType	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of call template. Possible values are: • Text

Field	Details
TotalCalls	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The total number of calls that use the CallTemplate.
TotalCallsCallBackLater	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The total Call Back Later call results that use the CallTemplate.
TotalCallsLeftVoicemail	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The total Left Voicemail call results that use the CallTemplate.
TotalCallsMeaningfulConnect	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The total Meaningful Connect call results that use the CallTemplate.
TotalCallsNotInterested	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The total Not Interested call results that use the CallTemplate.
TotalCallsUncategorized	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The total uncategorized call results that use the CallTemplate.

Field	Details
`TotalCallsUnqualified`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The total Unqualified call results that use the CallTemplate.

Campaign

Represents and tracks a marketing campaign, such as a direct mail promotion, webinar, or trade show.

Supported Calls

`describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`ActualCost`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Amount of money spent to run the campaign.
`AmountAllOpportunities`	**Type** currency **Properties** Filter, Sort **Description** Amount of money in all opportunities associated with the campaign, including closed/won opportunities. Label is **Value Opportunities in Campaign**.
`AmountWonOpportunities`	**Type** currency

Field	Details
	Properties Filter, Sort **Description** Amount of money in closed or won opportunities associated with the campaign. Label is **Value Won Opportunities in Campaign**.
`BudgetedCost`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Amount of money budgeted for the campaign.
`CampaignImageId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the campaign image. Available in API version 42.0 and later.
`CampaignMemberRecordTypeId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The record type ID for CampaignMember records associated with the campaign.
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization.
`Description`	**Type** textarea **Properties** Nillable **Description** Description of the campaign. Limit: 32 KB. Only the first 255 characters display in reports.

Field	Details
`EndDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Ending date for the campaign. Responses received after this date are still counted.
`ExpectedResponse`	**Type** percent **Properties** Filter, Nillable, Sort **Description** Percentage of responses you expect to receive for the campaign.
`ExpectedRevenue`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Amount of money you expect to generate from the campaign.
`HierarchyActualCost`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Calculated field for the total amount of money spent to run the campaigns in a campaign hierarchy. Label is **Total Actual Cost in Hierarchy**.
`HierarchyBudgetedCost`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Calculated field for the total amount of money budgeted for the campaigns in a campaign hierarchy. Label is**Total Budgeted Cost in Hierarchy**.
`HierarchyExpectedRevenue`	**Type** currency **Properties** Filter, Nillable, Sort

Field	Details
	Description Calculated field for the total amount of money you expect to generate from the campaigns in a campaign hierarchy. Label is **Total Expected Revenue in Hierarchy**.
`HierarchyNumberSent`	**Type** double **Properties** Filter, Nillable, Sort **Description** Calculated field for the total number of individuals targeted by the campaigns in a campaign hierarchy. For example, the number of email messagess sent. Label is **Total Num Sent in Hierarchy**.
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this campaign is active (`true`) or not (`false`). Default value is `false`. Label is **Active**.
`LastActivityDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Value is one of the following, whichever is the most recent: • Due date of the most recent event logged against the record. • Due date of the most recently closed task associated with the record.
`LastReferencedDate`	**Type** datetime **Properties** Filter, Nillable, Sort, **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
`LastViewedDate`	**Type** datetime **Properties** Filter, Nillable, Sort,

Field	Details
	Description The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (`LastReferencedDate`) but not viewed it.
`Name`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** Required. Name of the campaign. Limit: is 80 characters.
`NumberOfContacts`	**Type** int **Properties** Filter, Group, Sort **Description** Number of contacts associated with the campaign. Label is **Total Contacts**.
`NumberOfConvertedLeads`	**Type** int **Properties** Filter, Group, Sort **Description** Number of leads that were converted to an account and contact due to the marketing efforts in the campaign. Label is **Converted Leads**.
`NumberOfLeads`	**Type** int **Properties** Filter, Group, Sort **Description** Number of leads associated with the campaign. Label is **Leads in Campaign**.
`NumberOfOpportunities`	**Type** int **Properties** Filter, Group, Sort **Description** Number of opportunities associated with the campaign. Label is **Opportunities in Campaign**.

Field	Details
NumberOfResponses	**Type** int **Properties** Filter, Group, Sort **Description** Number of contacts and unconverted leads with a Member Status equivalent to “Responded” for the campaign. Label is **Responses in Campaign**.
NumberOfWonOpportunities	**Type** int **Properties** Filter, Group, Sort **Description** Number of closed or won opportunities associated with the campaign. Label is **Won Opportunities in Campaign**.
NumberSent	**Type** double **Properties** Filter, Nillable, Sort **Description** Number of individuals targeted by the campaign. For example, the number of emails sent. Label is **Num Sent**.
OwnerId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user who owns this campaign. Default value is the user logging in to the API to perform the create.
ParentCampaign	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** The campaign above the selected campaign in the campaign hierarchy.
ParentId	**Type** reference

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** ID of the parent Campaign record, if any.
`RecordTypeId`	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the record type assigned to this object.
`StartDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Starting date for the campaign.
`Status`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** Status of the campaign, for example, Planned, In Progress. Limit: 40 characters.
`TenantId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the associated Pardot business unit. Read-only. Available in API verson 51.0 and later.
`TotalAmountAllOpportunities`	**Type** currency **Properties** Filter **Description** Calculated field for total amount of all opportunities associated with the campaign hierarchy, including closed/won opportunities. Label is **Total Value Opportunities in Hierarchy**.

Field	Details
TotalAmountAllWonOpportunities	**Type** currency **Properties** Filter **Description** Calculated field for amount of all closed/won opportunities associated with the campaign hierarchy. Label is **Total Value Won Opportunities in Hierarchy**.
TotalNumberofContacts	**Type** int **Properties** Filter **Description** Calculated field for number of contacts associated with the campaign hierarchy. Label is **Total Contacts in Hierarchy**.
TotalNumberofConvertedLeads	**Type** int **Properties** Filter **Description** Calculated field for the total number of leads associated with the campaign hierarchy that were converted into accounts, contacts, and opportunities. Label is **Total Converted Leads in Hierarchy**.
TotalNumberofLeads	**Type** int **Properties** Filter **Description** Calculated field for total number of leads associated with the campaign hierarchy. This number also includes converted leads. Label is **Total Leads in Hierarchy**.
TotalNumberofOpportunities	**Type** int **Properties** Filter **Description** Calculated field for the total number of opportunities associated with the campaign hierarchy. Label is **Total Opportunities in Hierarchy**.

Field	Details
`TotalNumberofResponses`	**Type** int **Properties** Filter **Description** Calculated field for number of contacts and unconverted leads that have a `Member Status` equivalent to "Responded" for the campaign hierarchy. Label is **Total Responses in Hierarchy**.
`TotalNumberofWonOpportunities`	**Type** int **Properties** Filter **Description** Calculated field for the total number of won opportunities associated with the campaign hierarchy. Label is **Total Won Opportunities in Hierarchy**.
`Type`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** Type of campaign, for example, Direct Mail or Referral Program. Limit: 40 characters.

Usage

Client applications can create, update, delete, and query Attachment records associated with a campaign via the API.

The Campaign object is defined only for those organizations that have the marketing feature enabled and valid marketing licenses. In addition, it is accessible only to those users that are enabled as marketing users. If the organization does not have the marketing feature or valid marketing licenses, this object does not appear in the `describeGlobal()` call, and you can't use `describeSObjects()` or `query()` with the Campaign object.

Note: The main constituent of a campaign is a CampaignMember. You will commonly need to update campaigns with CampaignMember.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

CampaignFeed (API version 18.0)
Feed tracking is available for the object.

CampaignHistory (API version 40.0)
History is available for tracked fields of the object.

CampaignOwnerSharingRule

Sharing rules are available for the object.

CampaignShare

Sharing is available for the object.

SEE ALSO:

Object Basics

CampaignInfluence

Represents the association between a campaign and an opportunity in Customizable Campaign Influence. This object is available in API version 37.0 and later.

Note: This information applies only to Customizable Campaign Influence and not to Campaign Influence 1.0.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

To access this object, Customizable Campaign Influence must be enabled. Customer Portal users can't access this object.

Fields

Field Name	Details
`CampaignId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the associated campaign.
`ContactId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the contact on the associated opportunity.

Field Name	Details
`Influence`	**Type** percent **Properties** Create, Defaulted on create, Filter, Nillable, Sort, Update **Description** The percentage of the associated opportunity's Amount field attributed to the associated campaign.
`ModelId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the campaign influence model associated with the record.
`OpportunityId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the associated opportunity.
`RevenueShare`	**Type** currency **Properties** Filter, Nillable, Sort **Description** The amount of revenue from the associated opportunity attributed to the associated campaign.

Usage

Use this object to create campaign influence records for your custom campaign influence models. Do not create campaign influence records for the Primary Campaign Source model. Records added to the Primary Campaign Source model via the API are deleted when the model is recalculated.

CampaignInfluenceModel

This read-only object represents a campaign influence model in Customizable Campaign Influence. Use campaign influence models to group `CampaignInfluence` records created by a specific set of triggers and workflows that you define. The Primary Campaign Source influence model is the default model. This object is available in API version 37.0 and later.

Note: This information applies only to Customizable Campaign Influence and not to Campaign Influence 1.0.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

To access this object, Customizable Campaign Influence must be enabled. Customer Portal users can't access this object.

Fields

Field Name	Details
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The API name of the influence model. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization.
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the model is active. Active models can generate campaign influence records. Deactivating a model deletes its campaign influence records. Custom models are always active and this field is ignored.
`IsDefaultModel`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the model is the default model (`true`) or not (`false`). `CampaignInfluence` records associated with the default model appear in 3 locations.

Field Name	Details
	• The Campaign Influence related list on opportunities • The Influenced Opportunities related list on campaigns • The Campaign Statistics section on campaigns The value of `IsDefaultModel` can only be true for 1 model at a time.
`IsModelLocked`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the model is locked (`true`) or not (`false`). Records for locked models can only be added, updated, or deleted via the API.
`Language`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language of the influence model.
`MasterLabel`	**Type** string **Properties** Filter, Group, Sort **Description** The label for the influence model.
`ModelDescription`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The description of the influence model.
`ModelType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Indicates whether the model is the Primary Campaign Source influence model, or a custom model. These values are the allowed.

Field Name	Details
	• 1: Primary Campaign Source Model • 2: Custom Model • 3: First Touch Model • 4: Last Touch Model • 5: Even Distribution Model • 6: Data-Driven Model
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
`RecordPreference`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The value of this field determines when to create campaign influence records. • AllRecords: Creates records regardless of the revenue attribution percentage. • RecordsWithAttribution: Creates records only when the revenue attribution is greater than 0%.

CampaignMember

Represents the association between a campaign and either a lead or a contact.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`CampaignId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the Campaign to which this Lead or Contact is associated.
`City`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The city for the address of the lead or contact.
`CompanyOrAccount`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The company or account of the lead or contact.
`ContactId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** Required. ID of the Contact who is associated with a Campaign.
`CurrencyIsoCode`	**Type** picklist

Field	Details
	Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization.
`Country`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The country for the address of the lead or contact.
`Description`	**Type** textarea **Properties** Nillable **Description** The description of the associated lead or contact.
`DoNotCall`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates that the contact does not wish to be called.
`Email`	**Type** email **Properties** Filter, Group, Nillable, Sort **Description** Email address for the contact or lead.
`Fax`	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** Fax number for the contact or lead.

Field	Details
FirstName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The first name of the contact or lead.
FirstRespondedDate	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Indicates the date on which the campaign member was first given a responded status.
HasOptedOutOfEmail	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the contact or lead would prefer not to receive email from Salesforce (`true`) or not (`false`).
HasOptedOutOfFax	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates that the contact or lead does not wish to receive faxes.
HasResponded	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the campaign member has responded to the campaign (`true`) or not (`false`). Label is **Responded**.
LastName	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The last name of the contact or lead. Limit is 80 characters.
LeadId	**Type** reference **Properties** Create, Filter, Group, Nillable,Sort **Description** Required. ID of the Lead who is associated with a Campaign.
LeadOrContactId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the associated lead or contact.
LeadOrContactOwnerId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the owner of the associated lead or contact.
LeadSource	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** The source from which the lead was obtained.
MobilePhone	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** The mobile phone number of the lead or contact.
Name	**Type** string

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** First and last name of the contact or lead with which the campaign member is associated.
`Phone`	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** The phone number of the lead or contact.
`PostalCode`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The postal code of the lead or contact.
`RecordTypeId`	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the record type assigned to this object. To change the record type, modify the `CampaignMemberRecordTypeId` field on the associated Campaign.
`Salutation`	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** Salutation for the lead or contact.
`State`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The state for the address of the lead or contact. Limit is 80 characters.

Field	Details
`Status`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Controls the `HasResponded` flag on this object. You can't directly set the `HasResponded` flag, as it is read-only. You can set it indirectly by setting this field in a create or update call. Each predefined value implies a `HasResponded` flag value. Each time you update this field, you implicitly update the `HasResponded` flag. In the Salesforce user interface, Marketing users can define valid status values for the `Status` picklist. They can choose one status as the default status. For each `Status` field value, they can also select which values to count as "Responded," meaning that the `HasResponded` flag is set to `true` for those values. 40 character limit. Note: When creating or updating campaign members, use the text value for `Status` instead of the ID from the CampaignMemberStatus object.
`Street`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The street for the address of the lead or contact.
`Title`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Title for the lead or contact.
`Type`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Indicates whether the campaign member is a lead or a contact.

Note: If you are importing CampaignMember data into Salesforce and want to set the value for an audit field, such as `CreatedDate`, contact Salesforce. Audit fields are automatically updated during API operations unless you request to set these fields yourself..

Usage

Each record has a unique ID, and must contain either a `ContactId` or a `LeadId`, but can't contain both. Any attempt to create a single record with both results in a successful insert but only the `ContactId` is inserted. However, you can create two separate records on a Campaign—one for the Lead and one for the Contact.

Standard fields from a Contact or Lead are associated with the CampaignMember object but you can't query them directly. To include a lead's `Phone` in your query, for example, query the field from the Lead object.

```
SELECT Id, (SELECT Phone FROM Lead)
FROM CampaignMember
```

This object is defined only for those organizations that have the marketing feature and valid marketing licenses. If the organization does not have the marketing feature or valid marketing licenses, this object does not appear in the `describeGlobal()` call, and you can't use `describeSObjects()` or `query()` with the CampaignMember object.

In API version 16.0 and later, a `create()` call only creates record; in earlier versions, a `create()` call creates and updates records. The API determines whether a record exists with the specified `CampaignId` and either `ContactId` or `LeadId`.

Note: Only use a `ContactId` or `LeadId`, but not both, unless you want to track lead-based campaign members you convert to contacts.

When using the API, the `create()` call only requires read access to campaigns.

If the record does not exist for the given `ContactId` or `LeadId`, then a new record is created. If the record exists, an error is returned and no update is made. To update an existing record, specify the ID of the CampaignMember record to update.

In API versions 15.0 and earlier, if you submit multiple records using a single create request, and if more than one record matches an existing record, only the first record submitted updates the existing record. If any of the submitted records match each other but do not match existing records, only the last record submitted is created.

To delete a record, specify the ID of the CampaignMember record to delete.

When creating or updating records, the `Status` field value specified in the call is verified as a valid status for the given Campaign:

- If the specified `Status` value is a valid status, the value is updated, and the `HasResponded` field is updated to either `true` or `false`, depending on the `Status` value association with `HasResponded`.
- If the specified `Status` value is not a valid status, the API assigns the default status to the `Status` field and updates the `HasResponded` field with the associated value. However, if the given Campaign does not have a default status, the API assigns the value specified in the call to the `Status` field, and the `HasResponded` field is set to `false`.

SEE ALSO:

Campaign

CampaignMemberStatus

CampaignMemberStatus

One or more member status values defined for a campaign.

Supported Calls

`describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Customer Portal users can't access this object.

You can't delete a CampaignMemberStatus if that status is designated as the default status or if the status is currently used in a Campaign.

Fields

Field	Details
`CampaignId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the campaign associated with this member status.
`HasResponded`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this status is equivalent to “Responded” (`true`) or not (`false`). Beginning with API version 39.0, at least one `CampaignMemberStatus` on each campaign must have a `hasResponded` value of `true`.
`IsDefault`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this status is the default status (`true`) or not (`false`). Beginning with API version 39.0, there must be a default CampaignMemberStatus defined for every campaign.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`Label`	**Type** string

Field	Details
	Properties Filter, Sort **Description** Label for the status in the picklist. Limited to 765 characters.
`SortOrder`	**Type** int **Properties** Filter, Group, Sort, Update **Description** Unique number order where this campaign member status appears in the picklist.

Usage

Use this object to create picklist items for the member status in a campaign.

This object is defined only for those organizations that have the marketing feature and valid marketing licenses. In addition, the object is accessible only to those users that are enabled as marketing users. If the organization does not have the marketing feature or valid marketing licenses, this object does not appear in a `describeGlobal()` call, and you can't use `describeSObjects()` or `query()` with the CampaignMember object.

SEE ALSO:

Campaign

CampaignMember

CampaignOwnerSharingRule

Represents the rules for sharing a campaign with User records other than the owner or anyone above the owner in the role hierarchy.

Note: To enable access to this object for your org, contact Salesforce customer support. However, we recommend that you instead use Metadata API to programmatically update owner sharing rules because it triggers automatic sharing rule recalculation. The SharingRules Metadata API type is enabled for all orgs.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`CampaignAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of access granted to the target Group, or UserRole. The possible values are: • `Read` • `Edit` • `All`
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters. This field is available in API version 29.0 and later.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. This field is available in API version 24.0 and later. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort

Field	Details
	Description The ID representing the source group. ACampaign owned by a User in the source Group triggers the rule to give access.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the User or Group being granted access.

Usage

Use this object to manage the sharing rules for campaigns.

SEE ALSO:

Metadata API Developer Guide: SharingRules

CampaignShare

Represents a sharing entry on a Campaign.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Summer '20 and later, only users with access to the Campaign object can access this object.

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field	Details
`CampaignId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the Campaign associated with this sharing entry. This field can't be updated.
`CampaignAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the User or Group has to the Campaign. The possible values are: • `Read` • `Edit` • `All` (This value is not valid for creating or updating records.) This field must be set to an access level that is higher than the organization's default access level for Campaign.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can only write to this field when its value is either omitted or set to `Manual` (default). You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Valid values: • `Rule`—The User or Group has access via a Campaign sharing rule. • `GuestRule`—The User or Group has access via a Campaign guest user sharing rule. • `Manual`—The User or Group has access because a User with "`All`" access manually shared the Campaign with them. • `Owner`—The User is the owner of the Campaign. • `LpuImplicit`—The User has access to records owned by high-volume Experience Cloud site users via a share group. • `ARImplicit`—The User, who belongs to a partner or customer account, has access to the Campaign via an account relationship data sharing rule.

Field	Details
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the User or Group that has been given access to the Campaign. This field can't be updated.

Usage

This object allows you to determine which users and groups can view or edit Campaign records owned by other users.

CampaignTag

Associates a word or short phrase with a Campaign.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ItemId`	**Type** reference **Properties** Create, Filter **Description** ID of the tagged item.
`Name`	**Type** string **Properties** Create, Filter **Description** Name of the tag. If this value does not already exist, a new TagDefinition is created and becomes the parent of this Tag object. Otherwise, a TagDefinition with the same name becomes the parent of this Tag object. Parent relationships are created automatically.

Field Name	Details
`TagDefinitionId`	**Type** reference **Properties** Filter **Description** ID of the parent TagDefinition object that owns the tag.
`Type`	**Type** picklist **Properties** Create, Filter, Restricted picklist **Description** Defines the visibility of a tag. Valid values: • `Public`—The tag can be viewed and manipulated by all users in an organization. • `Personal`—The tag can be viewed or manipulated only by a user with a matching `OwnerId`.

Usage

CampaignTag stores the relationship between its parent TagDefinition and the Campaign being tagged. Tag objects act as metadata, allowing users to describe and organize their data.

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

CardPaymentMethod

References a credit card or debit card payment method. This entity implements the PaymentMethod entity interface. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

To access Commerce Payments entities, your org must have a Salesforce Order Management license with the Payment Platform org permission activated. Commerce Payments entities are available only in Lightning Experience.

Fields

Field	Details
AccountId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Customer account for the payment method.
AuditEmail	**Type** email **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Email of the payment method holder. This field is available in API v49.0 and later. It does not appear in the UI by default for Salesforce orgs that upgraded from v48.0. Users must add it to the CardPaymentMethod page layout on their own.
AutoCardType	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** Card network type, derived from the card number. This is a system field.
CardBin	**Type** int **Properties** Create, Filter, Group, Nillable, Sort **Description** First six digits of the card number.
CardCategory	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Defines whether the card is a credit card or debit card. Possible values are: • `CreditCard`—Credit Card

Field	Details
	• `DebitCard`—Debit Card
`CardHolderFirstName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** First name of the cardholder.
`CardHolderLastName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Last name of the cardholder.
`CardHolderName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Full name of the cardholder.
`CardLastFour`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort **Description** Last four digits of the credit card or debit card.
`CardPaymentMethodNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** System-defined unique ID for the card payment method.
`CardType`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort

Field	Details
	Description Defines the credit card bank. Possible values are: • `AmericanExpress` • `DinersClub` • `JCB` • `Maestro` • `MasterCard` • `Visa`
`CardTypeCategory`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Defines the credit card bank. Used for internal reference. Possible values are: • `AmericanExpress` • `DinersClub` • `JCB` • `Maestro` • `Master` • `Visa`
`Comments`	**Type** textarea **Properties** Create, Nillable, Update **Description** Users can add comments to provide additional details about a record. Maximum of 1000 characters.
`CompanyName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Company of the cardholder.

Field	Details
DisplayCardNumber	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Masked digits for the full credit card number except the last four digits.
Email	**Type** email **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Email address of the card payment method holder.
ExpiryMonth	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The card's expiration month.
ExpiryYear	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The card's expiration year.
GatewayDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date that the card payment method interacted with the payment gateway.
GatewayResultCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description The result of the card payment method's interaction with the payment gateway during a transaction request.
`GatewayResultCodeDescription`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Additional information about the gateway result code. Descriptions will vary between payment gateway providers.
`GatewayTokenDetails`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Additional information about the gateway token.
`GatewayToken`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Unique ID generated by the payment gateway for the card for future transactions.
`IpAddress`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** IP address of the card payment method holder. This field is available in API v49.0 and later. It does not appear in the UI by default for Salesforce orgs that upgraded from v48.0. Users must add it to the CardPaymentMethod page layout on their own.
`InputCardNumber`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort

Field	Details
	Description Input field for the card number. This field doesn't store the card number directly, but instead populates CardBin, LastFour, and DisplayCardNumber based on the value entered in InputCardNumber.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
MacAddress	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** MAC address of the card payment method holder. This field is available in API v49.0 and later. It does not appear in the UI by default for Salesforce orgs that upgraded from v48.0. Users must add it to the CardPaymentMethod page layout on their own.
NickName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** User-defined nickname for the card payment method.
PaymentGatewayId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort

Field	Details
	Description The payment gateway used to create a gateway token. For transactions with a saved payment method in Salesforce, this field stores the payment gateway record used in the transaction.
PaymentMethodAddress	**Type** address **Properties** Filter, Nillable **Description** Full address related to the card payment method. Also known as the billing address.
PaymentMethodCity	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Part of the address for the payment method.
PaymentMethodCountry	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Part of the address for the payment method.
PaymentMethodGeocodeAccuracy	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Part of the address for the payment method. Possible values are: • Address • Block • City • County • ExtendedZip • NearAddress • Neighborhood • State

Field	Details
	• `Street` • `Unknown` • `Zip`
`PaymentMethodLatitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Part of the address for the payment method.
`PaymentMethodLongitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Part of the address for the payment method.
`PaymentMethodPostalCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Part of the address for the payment method.
`PaymentMethodState`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Part of the address for the payment method.
`PaymentMethodStreet`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Part of the address for the payment method.
`Phone`	**Type** phone

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** Phone number of the card payment method holder. This field is available in API v49.0 and later. It does not appear in the UI by default for Salesforce orgs that upgraded from v48.0. Users must add it to the CardPaymentMethod page layout on their own.
ProcessingMode	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** Defines whether the card payment method is used for transactions made inside or outside the payment platform. Possible values are: • `External:` Transactions happened outside of the Salesforce payments platform. • `Salesforce:` Salesforce made and recorded an external call to the payment platform. This field is available in API v49.0 and later. It does not appear in the UI by default for Salesforce orgs that upgraded from v48.0. Users must add it to the CardPaymentMethod page layout on their own. Important: `ProcessingMode` is required to create a CardPaymentMethod entity.
SfResultCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Shows the results of the card payment method's interaction with the payment gateway. Possible values are: • `Decline` • `Indeterminate` • `PermanentFail` • `RequiresReview` • `Success` • `SystemError` • `ValidationError`
StartMonth	**Type** int

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** Start month of the card.
StartYear	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Start year of the card.
Status	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Possible values are: • Active • Canceled • InActive

CartCheckoutSession

Represents a checkout session used in Lightning B2B Commerce checkout. This object is available in API version 48.0 and later.

A checkout session is tied to a single web cart, but there can be multiple checkout sessions for a single cart.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is available only if the B2B Commerce on Lightning Experience license is enabled.

Fields

Field	Details
BackgroundOperationId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the in progress background operation.
CurrencyIsoCode	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The currency used for the checkout session. Default value is USD. Possible values are: • USD—U.S. Dollar
IsArchived	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether checkout processing is archived (true) or not (false). Once a session is archived, it can't be unarchived. Default value is false.
IsError	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the session is in error state (true) or not (false). Default value is false.
IsProcessing	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Determines whether checkout processing is in progress (true) or not (false). Default value is false.

Field	Details
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the checkout session.
`NextState`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The next state of the checkout session.
`OrderId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of a created order once the checkout session has gone from cart to order.
`State`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The current state of the checkout session.
`WebCartId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the cart that is used to create the checkout session.

CartDeliveryGroup

Represents shipping information for the delivery of items in an order against a store built with B2B Commerce on Lightning Experience. This object is available in API version 49.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

The CartDeliveryGroup object is available only if the B2B Commerce on Lightning Experience license is enabled.

Fields

Field	Details
`CartId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID the `WebCart on page 3079` that's associated with this delivery group.
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The ISO code for the currency that's specified on the buyer's account. Default value is `USD`. Possible values are: • `USD`—U.S. Dollar
`DeliverToAddress`	**Type** address **Properties** Filter, Nillable **Description** The address to which a buyer order is delivered.
`DeliverToCity`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The city to which a buyer order is delivered.

Field	Details
DeliverToCountry	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The country to which a buyer order is delivered.
DeliverToGeocodeAccuracy	**Type** picklist **Properties** Aggregate, Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The geocode location to which a buyer order is delivered. Possible values are: • Address • Block • City • County • ExtendedZip • NearAddress • Neighborhood • State • Street • Unknown • Zip
DeliverToLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The latitude of a buyer delivery location.
DeliverToLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The longitude of a buyer delivery location.

Field	Details
DeliverToName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The name of the person to which to deliver a buyer order.
DeliverToPostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The postal code to which to deliver a buyer order.
DeliverToState	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The state to which to deliver a buyer order.
DeliverToStreet	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street to which to deliver a buyer order.
DeliveryMethodId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID for the delivery method to use to deliver a buyer order.
DesiredDeliveryDate	**Type** datetime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date that a buyer requests to have an order delivered.

Field	Details
GrandTotalAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Sum of all cart items' `TotalAmount`, or `CartDeliveryGroup TotalAmount` plus `CartDeliveryGroup TotalTaxAmount`.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Name field, Sort, Update **Description** The name of this `CartDeliveryGroup` record. `Name` can be up to 255 characters.
ShippingInstructions	**Type** textarea **Properties** Create, Nillable, Update **Description** Instructions for delivering an order.
TotalAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Sum of all cart items `TotalPrice`, or `TotalProductAmount` plus `TotalChargeAmount`.
TotalChargeAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Cart items can be of type Product or Charge. This field contains the sum of all the cart items `TotalPrice` for all cart items of the `CHARGE` type.
TotalChargeTaxAmount	**Type** currency **Properties** Filter, Nillable, Sort

Field	Details
	Description Cart items can be of type Product or Charge. This field contains the Sum of all the cart items `TotalTaxAmount` for all cart items of the `CHARGE` type.
`TotalProductAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Cart items can be of type Product or Charge. This field contains the sum of all the cart items `TotalPrice` for all cart items of the `PRODUCT` type.
`TotalProductTaxAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Cart items can be of type Product or Charge. Sum of all the cart items `TotalTaxAmount` for all cart items of the `PRODUCT` type.
`TotalTaxAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Sum of all cart items `TotalTaxAmount`, or `TotalProductTaxAmount` plus `TotalChargeTaxAmount`.

CartDeliveryGroupMethod

Represents the selected delivery method for a cart delivery group used in Lightning B2B Commerce checkout. This object is available in API version 49.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is available only if the B2B Commerce on Lightning Experience license is enabled.

Fields

Field	Details
CartCheckoutSessionId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The unique ID used to identify your cart checkout session.
CartDeliveryGroupId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the cart delivery group associated with the checkout session.
CurrencyIsoCode	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The currency used for your shipping fee. Default value is `USD`. Possible values are: • `USD`—U.S. Dollar
DeliveryMethodId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the selected order delivery method.
ExternalProvider	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the external shipping method provider. Optional field.
Name	**Type** string

Field	Details
	Properties Create, Filter, Group, idLookup, Sort, Update **Description** Name of the delivery method.
`ShippingFee`	**Type** currency **Properties** Create, Filter, Sort, Update **Description** Shipping fee associated with the delivery method. Required field.
`WebCartId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the WebCart associated with the cart delivery group method. Required field.

Usage

Use the CartDeliveryGroupMethod object to give commerce buyers the ability to choose a delivery method for a cart delivery group. Shipping integrations populate the delivery options that are available for a cart delivery group.

CartItem

Represents an item in a `WebCart` that's active in a store built with B2B Commerce on Lightning Experience. Cart item can be of type `Product` or `Charge`. This object is available in API version 49.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

The CartItem object is available only if the B2B Commerce on Lightning Experience license is enabled.

Fields

Field	Details
`AdjustmentAmount`	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** Non-itemized adjustments for this cart item
`AdjustmentTaxAmount`	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** The tax that's calculated on the `AdjustmentAmount`.
`CartDeliveryGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the `CartDeliveryGroup` that's associated with a cart item.
`CartId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the `WebCart` that's associated with a cart item.
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The ISO code for the currency that's specified on the buyer's account. Default value is `USD`. Possible values are: • `EUR`—Euro • `USD`—U.S. Dollar

Field	Details
ListPrice	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** The original price of the cart item. Typically shown with a line through it. List price is shown only when it’s higher than the negotiated price. If the list price is the same or lower, it isn’t shown to the buyer.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of this `CartItem` record. `Name` can be up to 255 characters.
Product2Id	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of a product type cart item. Cart items can be of type `PRODUCT` or `CHARGE`.
Quantity	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The number of a given cart item in a cart.
SalesPrice	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** The discounted price of a cart item.
Sku	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description The Shelf-Keeping Unit ID of a cart item.
`TotalAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** The total cost of this cart item, including taxes and adjustments.
`TotalLineAmount`	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** Total amount for this cart item, based on sales price and quantity.
`TotalLineTaxAmount`	**Type** currency **Properties** Defaulted on create, Filter, Nillable, Sort **Description** Total tax amount for `TotalLineAmount`.
`TotalListPrice`	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** Total amount for this cart item, based on `ListPrice`. We provide this value for comparison. It's not the price that the buyer is paying
`TotalPrice`	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** Total amount for this cart item, including adjustments but excluding taxes.
`TotalTaxAmount`	**Type** currency

Field	Details
	Properties Filter, Nillable, Sort **Description** Total tax amount for this cart item. This value includes taxes for both `TotalLineAmount` and `AdjustmentAmount`.
`Type`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The `CartItem` type. Possible values are: • `Product` • `Charge`
`UnitAdjustedPrice`	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** Price per quantity unit after a discount or surcharge is applied. This field is available in API version 50.0 and later.
`UnitAdjustmentAmount`	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** Discount or surcharge to apply to a quantity unit. This amount is added to the `SalesPrice` to get the `UnitAdjustedPrice`. This field is available in API version 50.0 and later.

SEE ALSO:
CartDeliveryGroup
WebCart

CartTax

Represents taxes for a line item in a `WebCart` that's active in a store built with B2B Commerce on Lightning Experience. This object is available in API version 49.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

The CartTax object is available only if the B2B Commerce on Lightning Experience license is enabled.

Fields

Field	Details
`Amount`	**Type** currency **Properties** Create, Filter, Sort, Update **Description** Calculated tax amount.
`CartId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the `WebCart` being taxed.
`CartItemId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of a cart item being taxed.
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The ISO code for the currency that’s specified on the buyer’s account. Default value is `USD`. Valid values include: • `USD`—U.S. Dollar

Field	Details
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** A description of the tax. Enter up to 2000 characters.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of this `CartTax` record. `Name` can be up to 255 characters.
TaxCalculationDate	**Type** date **Properties** Create, Filter, Group, Sort, Update **Description** The date this tax was calculated.
TaxRate	**Type** percent **Properties** Create, Filter, Nillable, Sort, Update **Description** The applied tax rate for this line of tax.
TaxType	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of tax for this line of tax. Possible values are: • `Actual` • `Estimated`

SEE ALSO:

WebCart

CartValidationOutput

Associate errors to cart entities, such as cart line items, delivery groups, and the like, in a store built with B2B Commerce on Lightning Experience. An example error is "Out of stock." Available in API version 49.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

The CartValidationOutput object is available only if the B2B Commerce on Lightning Experience license is enabled.

Fields

Field	Details
`BackgroundOperationId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the background operation that ran the validation.
`CartId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the related `WebCart`.
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The ISO code for the currency that's specified on the buyer's account. Default value is `USD`.Possible values are: • `EUR`—Euro • `USD`—U.S. Dollar

Field	Details
IsDismissed	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the validation process is finished. Default value is `false`.
Level	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Describes the type of output resulting from the validation process. Possible values are: • 0 (`Info`) • 1 (`Error`) • 2 (`Warning`)
Message	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Defines the message to show in the log when validation is complete. Message can be up to 255 characters.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of this `CartValidationOutput` record. `Name` can be up to 255 characters.
RelatedEntityId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Foreign key to `WebCart`, `CartItem`, and `CartDeliveryGroup`.
RelatedEntityPrefix	**Type** string

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** Three-character prefix for the related entity.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The `CartValidationOutput` type. Possible values are: • 0 (`Inventory`) • 1 (`Taxes`) • 2 (`Pricing`) • 3 (`Shipping`) • 4 (`Entitlement`) • 5 (`System Error`) • 6 (`Other`)

SEE ALSO:

WebCart

CartItem

CartDeliveryGroup

Case

Represents a case, which is a customer issue or problem.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`AccountId`	**Type** reference

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** ID of the account associated with this case.
`BusinessHoursId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the business hours associated with this case.
`Comments`	**Type** textarea **Properties** Create, Delete, Layout, Nillable, Query, Retrieve, Search, Sort, Undelete, Update **Description** Used to insert a new CaseComment. Email textarea has a length of 4000 chars.
`CaseNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** Assigned automatically when each case is inserted. It can't be set directly, and it can't be modified after the case is created.
`ClosedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time when the case was closed.
`CommunityId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the zone associated with this case. This field is available in API version 24.0 and later.

Field	Details
ConnectionReceivedId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the PartnerNetworkConnection that shared this record with your organization. This field is available if you enabled Salesforce to Salesforce.
ConnectionSentId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the PartnerNetworkConnection that you shared this record with. This field is available if you enabled Salesforce to Salesforce. This field is supported using API versions earlier than 15.0. In all other API versions, this field's value is null. You can use the new PartnerNetworkRecordConnection object to forward records to connections.
ContactEmail	**Type** email **Properties** Filter, Group, Nillable, Sort **Description** Email address for the contact. The Case.ContactEmail field displays the Email field on the contact on page 725 that is referenced by Case.ContactId. Label is `Contact Email`. This field is available in API version 38.0 and later.
ContactFax	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** Fax number for the contact. Label is `Contact Fax`. This field is available in API version 38.0 and later.
ContactId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the associated contact.

Field	Details
ContactMobile	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** Mobile telephone number for the contact. Label is `Contact Mobile`. This field is available in API version 38.0 and later.
ContactPhone	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** Telephone number for the contact. Label is `Contact Phone`. This field is available in API version 38.0 and later.
CreatorFullPhotoUrl	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the user’s profile photo from the feed. Chatter Answers must be enabled to view this field. This field is available in API version 26.0 and later.
CreatorName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of the user who posted the question or reply. Only the first name of internal users (agents) appears to portal users in the feed. Chatter Answers must be enabled to view this field. This field is available in API version 26.0 and later.
CreatorSmallPhotoUrl	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the user’s thumbnail photo from the feed. Chatter Answers must be enabled to view this field. This field is available in API version 26.0 and later.

Field	Details
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** A text description of the case. Limit: 32 KB.
`FeedItemId`	**Type** reference **Properties** Create, Group, Nillable, Sort **Description** ID of the question in Chatter associated with the case. This field is available in API version 33.0 and later, and is only accessible in organizations where Question-to-Case is enabled.
`HasCommentsUnreadByOwner`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a case contains comments that the case owner hasn't read (`true`) or not (`false`).
`HasSelfServiceComments`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a case has comments added by a Self-Service user (`true`) or not (`false`). Only visible when Customer Portal is enabled.
`IsClosed`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the case is closed (`true`) or open (`false`). This field is controlled by the `Status` field; it can't be set directly. Label is `Closed`.
`IsClosedOnCreate`	**Type** boolean

Field	Details
	Properties Defaulted on create, Filter, Group, Sort **Description** Indicates whether the case was closed at the same time that it was created (`true`) or not (`false`). This flag is read-only and is automatically set when a record is created. It can't be set to `true` unless the `IsClosed` flag is also `true`.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is `Deleted`.
`IsEscalated`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the case has been escalated (`true`) or not. A case's escalated state does not affect how you can use a case, or whether you can query, delete, or update it. You can set this flag via the API. Label is `Escalated`.
`IsSelfServiceClosed`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the case is closed for Self-Service users (`true`) or not (`false`).
`IsStopped`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether an entitlement process on a case is stopped (`true`) or not (`false`).
`IsVisibleInSelfService`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field	Details
	Description Indicates whether the case can be viewed in the Customer Service Portal, Partner Service Portal, and Self-Service Portal (`true`) or not (`false`). This field is applied for case visibility in the Partner Relationship Management, Customer Service Portal, and the earlier version of Self Service Portal. The field does not alter sharing and will not prevent usage of a direct URL to a case if a portal user has read or write access.
`Language`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the case. The Language field is available when you enable Einstein Case Classification in Enterprise, Performance, and Unlimited edition orgs with Service Cloud. By default, only Einstein Case Classification uses this field.
`LastReferencedDate`	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
`LastViewedDate`	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (`LastReferencedDate`) but not viewed it.
`MasterRecordId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** If this object was deleted as the result of a merge, this field contains the ID of the record that was kept. If this object was deleted for any other reason, or has not been deleted, the value is `null`.

Field	Details
`Origin`	**Type** picklist **Properties** Create, Filter, Group, Nillable,Sort, Update **Description** The source of the case, such as `Email`, `Phone`, or `Web`. Label is `Case Origin`.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the contact who owns the case.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the parent case in the hierarchy. The label is `Parent Case`.
`Priority`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The importance or urgency of the case, such as `High`, `Medium`, or `Low`.
`QuestionId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The question in the answers zone that is associated with the case. This field does not appear if you don't have an answers zone enabled.
`Reason`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description The reason why the case was created, such as `Instructions not clear`, or `User didn't attend training`.
`RecordTypeId`	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the record type assigned to this object.
`SlaStartDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Shows the time that the case entered an entitlement process. If you have the Edit permission on cases, you can update or reset the time. This field is available in API version 18.0 and later.
`SourceId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the social post source.
`Status`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The status of the case, such as New, Closed, or Escalated. This field directly controls the `IsClosed` flag. Each predefined `Status` value implies an `IsClosed` flag value. For more information, see CaseStatus.
`StopStartDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time an entitlement process was stopped on the case.

Field	Details
	This field is available in API version 18.0 and later.
`Subject`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The subject of the case. Limit: 255 characters.
`SuppliedCompany`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The company name that was entered when the case was created. Label is `Company`.
`SuppliedEmail`	**Type** email **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The email address that was entered when the case was created. Label is `Email`. If your organization has an active auto-response rule, `SuppliedEmail` is required when creating a case via the API. Auto-response rules use the email in the contact specified by `ContactId`. If no email address is in the contact record, the email specified here is used.
`SuppliedName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The name that was entered when the case was created. Label is `Name`.
`SuppliedPhone`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The phone number that was entered when the case was created. Label is `Phone`.
`Type`	**Type** picklist

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The type of case, such as `Feature Request` or `Question`.

Note: If you are importing Case data and need to set the value for an audit field, such as `CreatedDate`, contact Salesforce. Audit fields are automatically updated during API operations unless you request to set these fields yourself.

Usage

Use the Case object to manage cases for your organization. Client applications can query, update, and delete Attachment records associated with a case via the API.

Assignment Rules

When you query or update a case, your client application can have the case automatically assigned to one or more User records based on assignment rules that have been configured in the user interface. To use this feature, your client application must set either of the following options (but not both) in the AssignmentRuleHeader used in the create or update:

Field	Field Type	Details
`assignmentRuleId`	reference	ID of the assignment rule to use. Can be an inactive assignment rule. If unspecified and `useDefaultRule` is `true`, then the default assignment rule is used. To find the ID for a given assignment rule, query the AssignmentRule object (specifying `RuleType="caseAssignment"`), iterate through the returned AssignmentRule objects, find the one you want to use, retrieve its ID, and then specify its ID in this field in the AssignmentRuleHeader.
`useDefaultRule`	boolean	Specifies whether to use the default rule for rule-based assignment (`true`) or not (`false`). The default rule is assigned by users in the Salesforce user interface.

For a code example that shows setting the AssignmentRuleHeader for a Lead (which is similar to setting the AssignmentRuleHeader for a Case), see Lead.

Separating Accounts from Contacts in Cases

In releases before 8.0, the `AccountId` could not be specified, it was derived from the contact's account. This behavior will continue to be supported in future releases, but you can also now specify an `AccountId`. If you do not specify the `AccountId` during the creation of a case, the value will default to the contact's `AccountId`.

Note: When a record is updated, if the `ContactId` has not changed, then the `AccountId` is not regenerated. This prevents the API from overwriting a value previously changed in the Salesforce user interface. However, if an API call changes the `ContactId` and the `AccountId` field is empty, then the `AccountId` is generated using the contact's account.

Using `_case` with Java

Depending on the development tool you use, you might need to write your application using `_case` instead of `Case`, because `case` is a reserved word in Java.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

CaseFeed (API version 18.0)
Feed tracking is available for the object.

CaseHistory
History is available for tracked fields of the object.

CaseOwnerSharingRule
Sharing rules are available for the object.

CaseShare
Sharing is available for the object.

SEE ALSO:

Account

CaseMilestone

CaseArticle

Represents the association between a Case and a KnowledgeArticle. This object is available in API version 20.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Access to this object is controlled by the parent Case and KnowledgeArticle. However, when querying, access is only controlled by the parent Case.

Customer Portal users can't access this object.

Fields

Field	Details
ArticleLanguage	**Type** picklist **Properties** Filter, Restricted picklist **Description** The language of the article associated with the case.
ArticleVersionNumber	**Type** int **Properties** Create, Group, Nillable **Description** The number assigned to a version of an article. This field is available in API version 24.0 and later.
CaseId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the Case associated with the KnowledgeArticle.
IsSharedByEmail	**Type** int **Properties** Create, Group, Nillable **Description** Indicates that the article has been shared with the customer through an email.
KnowledgeArticleId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the KnowledgeArticle associated with the Case.

Usage

This object represents the association of a knowledge article with a Case. An article is associated with a case when it's relevant to a specific issue, when it helps an agent solve the case, or when the agent sends the article to a customer.

You can use this object to include case-article associations in Apex and Visualforce.

You can't update this object via the API. If you attempt to create a record that matches an existing record, the create request simply returns the existing record.

SEE ALSO:

Case

KnowledgeArticle

CaseComment

Represents a comment that provides additional information about the associated Case.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`CommentBody`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Text of the CaseComment. The maximum size of the comment body is 4,000 bytes. Label is **Body**.
`ConnectionReceivedId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the PartnerNetworkConnection that shared this record with your organization. This field is available if you enabled Salesforce to Salesforce.
`ConnectionSentId`	**Type** reference

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** ID of the PartnerNetworkConnection that you shared this record with. This field is available if you enabled Salesforce to Salesforce. This field is supported using API versions earlier than 15.0. In all other API versions, this field's value is null. You can use the new PartnerNetworkRecordConnection object to forward records to connections.
`CreatorFullPhotoUrl`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the user's profile photo from the feed. Chatter Answers must be enabled to view this field. This field is available in API version 26.0 and later.
`CreatorName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of the user who posted the question or reply. Only the first name of internal users (agents) appears to portal users in the feed. Chatter Answers must be enabled to view this field. This field is available in API version 26.0 and later.
`CreatorSmallPhotoUrl`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the user's thumbnail photo from the feed. Chatter Answers must be enabled to view this field. This field is available in API version 26.0 and later.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.

Field	Details
`IsNotificationSelected`	**Type** boolean **Properties** Create, Defaulted on create, Update **Description** Indicates whether an email notification is sent to the case contact when a CaseComment is created or updated. When this field is queried, it always returns null. This field is available only when the `Enable Case Comment Notification to Contacts` setting is enabled on the Support Settings page in Setup. To send email notifications for CaseComment, you must use the `EmailHeader triggerUserEmail`. Available in API version 43.0 and later.
`IsPublished`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the CaseComment is visible to customers in the Self-Service portal (`true`) or not (`false`). Label is **Published**. This is the only CaseComment field that can be updated via the API.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort, **Description** Required. ID of the parent Case of the CaseComment.

Note: If you're importing CaseComment data and must set the value for an audit field, such as `CreatedDate`, contact Salesforce. Record id's can't delete CaseComments entities when calling the Database.delete() Apex method or its analogous SOAP API. Audit fields are automatically updated during API operations unless you request to set these fields yourself.

Usage

In the Salesforce user interface, comments are entered by a User working on a Case. All users have access to create and view CaseComment in the Salesforce user interface and when using the API. In the API, CaseComment records can't be modified after insertion unless the user has the "Modify All" object-level permission for Cases or the "Modify All Data" permission. If not, users can only update the `IsPublished` field, and can't delete CaseComment.

SEE ALSO:

Object Basics

CaseContactRole

Represents the role that a given Contact plays on a Case.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`CasesId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the cases associated with this contact.
`ContactId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Required. ID of the contact.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`Role`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Name of the role played by the contact on this case, such as Technical Contact, Business Contact, Decision Maker, and so on. Must be unique—there can't be multiple records in which the **CaseId**, `ContactId` , and `Role` values are identical. Different contacts can play the same role on the same case. A contact can play different roles on the same case.

Usage

Use this object to define the role that a given Case plays on a given Contact. For example, you can use this object to be able to see all contacts who are associated to a case, or, given a contact, be able to query all cases that they are associated with, even if they are not the primary contact on the case.

CaseHistory

Represents historical information about changes that have been made to the associated Case.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Special Access Rules

This object is always read-only.

Fields

Field	Details
`CaseId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the Case associated with this record.
`DataType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Data type of the field that was changed.
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Name of the case field that was modified, or a special value to indicate some other modification to the case. The possible values, in addition to the case field names, are:

Field	Details
	• **ownerAssignment**—The owner of the case was changed. • **ownerAccepted**—A user took ownership of a case from a queue. • **ownerEscalated**—The owner of the case was changed due to case escalation. • **external**—A user made the case visible to customers in the Customer Self-Service Portal.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** New value of the modified case field. Maximum of 255 characters.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** Previous value of the modified case field. Maximum of 255 characters.

Usage

Case history entries are indirectly created each time a case is modified.

Two rows are added to this record when foreign key fields change. One row contains the foreign key object names that display in the online application. For example, `Jane Doe` is recorded as the name of a Contact. The other row contains the actual foreign key ID that is only returned to and visible from the API.

This object respects field level security on the parent object.

SEE ALSO:

Object Basics

CaseMilestone

Represents a milestone (required step in a customer support process) on a Case. This object is available in API version 18.0 and later.

Supported Calls

`describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`

Fields

Field	Details
`BusinessHoursId`	**Type** reference **Properties** Filter, Group, Nillable,Sort **Description** ID of the BusinessHours associated with the CaseMilestone.
`CaseId`	**Type** reference **Properties** Filter **Description** ID of the case.
`CompletionDate`	**Type** dateTime **Properties** Filter, Nillable, Update **Description** The date and time the milestone was completed.
`ElapsedTimeInDays`	**Type** double **Properties** Filter, Nillable **Description** The time required to complete a milestone in days.
`ElapsedTimeInHrs`	**Type** double

Field	Details
	Properties Filter, Nillable **Description** The time required to complete a milestone in hours.
`ElapsedTimeInMins`	**Type** int **Properties** Filter, Nillable **Description** The time required to complete a milestone in minutes.
`IsCompleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the milestone is completed (`true`) or not (`false`).
`IsViolated`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the milestone is violated (`true`) or not (`false`).
`MilestoneTypeId`	**Type** reference **Properties** Filter, Nillable **Description** The ID of the milestone on the case.
`StartDate`	**Type** dateTime **Properties** Filter, Nillable, Update **Description** The date and time the milestone started on the case.
`TargetDate`	**Type** dateTime

Field	Details
	Properties Filter **Description** The date and time the milestone must be completed.
`TargetResponseInDays`	**Type** double **Properties** Filter, Nillable, Sort **Description** The time to complete the milestone in days.
`TargetResponseInHrs`	**Type** double **Properties** Filter, Nillable, Sort **Description** The time to complete the milestone in hours.
`TargetResponseInMins`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The time to complete the milestone in minutes.
`TimeRemainingInDays`	**Type** double **Properties** Group, Nillable, Sort **Description** Time remaining to reach the milestone target, measured in days.
`TimeRemainingInHrs`	**Type** text **Properties** Nillable **Description** Time remaining to reach the milestone target, measured in hours.
`TimeRemainingInMins`	**Type** text

Field	Details
	Properties Group, Nillable, Sort **Description** Time remaining to reach the milestone target. The format is minutes and seconds.
`TimeSinceTargetInDays`	**Type** double **Properties** Nillable, Sort **Description** The time elapsed since the milestone target, measured in days.
`TimeSinceTargetInHrs`	**Type** string **Properties** Group, Nillable, Sort **Description** The time elapsed since the milestone target, measured in hours.
`TimeSinceTargetInMins`	**Type** string **Properties** Group, Nillable, Sort **Description** The time elapsed since the milestone target. The format is minutes and seconds.

Usage

This object lets you view a milestone on a case. It also lets you view if the milestone was completed and when it must be completed.

SEE ALSO:

Case

MilestoneType

SlaProcess

CaseOwnerSharingRule

Represents the rules for sharing a case with users other than the owner.

Note: To enable access to this object for your org, contact Salesforce customer support. However, we recommend that you instead use Metadata API to programmatically update owner sharing rules because it triggers automatic sharing rule recalculation. The SharingRules Metadata API type is enabled for all orgs.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`CaseAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of sharing being allowed. The possible values are: • `Read` • `Edit`
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters. This field is available in API version 29.0 and later.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name

Field	Details
	in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. This field is available in API version 24.0 and later. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group. Cases owned by users in the source group trigger the rule to give access.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the target user or group. Target users or groups are given access.

Usage

Use this object to manage the sharing rules for cases. General sharing and territory management-related sharing use this object.

SEE ALSO:

Case

CaseShare

Metadata API Developer Guide: SharingRules

CaseShare

Represents a sharing entry on a Case.

Supported Calls

`describeSObjects()`, `create()`, `delete()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Summer '20 and later, only users with access to the Case object can access this object.

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field	Details
`CaseAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the User or Group has to the Case. The possible values are: • `Read` • `Edit` • `All` This value is not valid for creating or deleting records. This field must be set to an access level that is higher than the organization's default access level for cases.
`CaseId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the Case associated with this sharing entry. This field can't be updated.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter

Field	Details
	Description Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can only write to this field when its value is either omitted or set to `Manual` (default). You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Valid values include: • `Manual`—The User or Group has access because a user with "All" access manually shared the Case with them. • `Owner`—The User is the owner of the Case. • `ImplicitChild`—The User or Group has access to the Case on the Account associated with this Case. • `RelatedPortalUser`—The portal user is the contact on the Case. • `Rule`—The User or Group has access via a Case sharing rule. • `GuestRule`—The User or Group has access via a Case guest user sharing rule. • `Team`—The User or Group has team access. • `LpuImplicit`—The User has access to records owned by high-volume Experience Cloud site users via a share group. • `ARImplicit`—The User, who belongs to a partner or customer account, has access to the Case via an account relationship data sharing rule.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the User or Group that has been given access to the Case. This field can't be updated.

Usage

This object allows you to determine which users and groups can view and edit Case records owned by other users.

If you attempt to create a new record that matches an existing record, request updates any modified fields and returns the existing record.

SEE ALSO:

- AccountShare
- LeadShare
- OpportunityShare

CaseSolution

Represents the association between a Case and a Solution.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`CaseId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the Case associated with the Solution.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`SolutionId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the Solution associated with the case.

Usage

You can't update this object via the API. If you attempt to create a record that matches an existing record, the request simply returns the existing record.

SEE ALSO:

CaseShare

SolutionStatus

CaseStatus

Represents the status of a Case, such as New, On Hold, or In Process.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`ApiName`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** Uniquely identifies a picklist value so it can be retrieved without using an id or master label.
`IsClosed`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this case status value represents a closed Case (`true`) or not (`false`). Multiple case status values can represent a closed Case.
`IsDefault`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this is the default case status value (`true`) or not (`false`) in the picklist.

Field	Details
`MasterLabel`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Master label for this case status value. This display value is the internal label that does not get translated.
`SortOrder`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Number used to sort this value in the case status picklist. These numbers are not guaranteed to be sequential, as some previous case status values might have been deleted.

Usage

This object represents a value in the case status picklist. The case status picklist provides additional information about the status of a Case, such as whether a given `Status` value represents an open or closed case. Query the CaseStatus object to retrieve the set of values in the case status picklist, and then use that information while processing Case records to determine more information about a given case. For example, the application could test whether a given case is open or closed based on its `Status` value and the value of the `IsClosed` property in the associated CaseStatus object.

SEE ALSO:

Object Basics

CaseSubjectParticle

Represents the Social Business Rules custom format for the **Case Subject** field on cases created from inbound social posts. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name for the CaseSubjectParticle object. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This field is automatically generated, but you can supply your own value if you create the record using the API. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`Index`	**Type** int **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. The order in which the custom **Case Subject** is generated, meaning if the social network is 0 and the social message is 1, then the subject generates as `Twitter | Tweet`.
`Language`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the case subject field. Possible values are: • `ar`—Arabic • `da`—Danish • `de`—German • `en_US`—English • `es`—Spanish • `es_MX`—Spanish (Mexico) • `fi`—Finnish • `fr`—French

Field	Details
	• `it`—Italian • `iw`—Hebrew • `ja`—Japanese • `ko`—Korean • `nl_NL`—Dutch • `no`—Norwegian • `pt_BR`—Portuguese (Brazil) • `ru`—Russian • `sv`—Swedish • `th`—Thai • `zh_CN`—Chinese (Simplified) • `zh_TW`—Chinese (Traditional)
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label for the case subject field.
`TextField`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Specifies inbound social content added to **Case Subject** in case records.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. Specifies the custom **Case Subject** format from which inbound social content appears in case records. Possible values are: • `ColonSeparator` • `Content`—Message • `HyphenSeparator` • `MessageType` • `PipeSeparator`

Field	Details
	• `ProvidedString` • `RealName` • `Sentiment` • `SocialHandle` • `SocialNetwork` • `Source`

Usage

In the Salesforce UI, case subjects are brief descriptions of cases. They are what agents see on cases first. Social Business Rules specify the brief descriptions of cases created from social posts. Using CaseSubjectParticle objects you can build your own case subject format, where each object represents a social post's component. For example, combining CaseSubjectParticle objects with components for types `MessageType`, `RealName`, and `SocialNetwork` results in "Tweet Customer123 Twitter".

CaseTag

Associates a word or short phrase with a Case

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ItemId`	**Type** reference **Properties** Create, Filter **Description** ID of the tagged item.
`Name`	**Type** string **Properties** Create, Filter **Description** Name of the tag. If this value does not already exist, a new TagDefinition is created and becomes the parent of this Tag object. Otherwise, a TagDefinition with the same name becomes the parent of this Tag object. Parent relationships are created automatically.

Field Name	Details
`TagDefinitionId`	**Type** reference **Properties** Filter **Description** ID of the parent TagDefinition object that owns the tag.
`Type`	**Type** picklist **Properties** Create, Filter, Restricted picklist **Description** Defines the visibility of a tag. Valid values: • `Public`—The tag can be viewed and manipulated by all users in an organization. • `Personal`—The tag can be viewed or manipulated only by a user with a matching `OwnerId`.

Usage

CaseTag stores the relationship between its parent TagDefinition and the Case being tagged. Tag objects act as metadata, allowing users to describe and organize their data.

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

CaseTeamMember

Represents a case team member, who works with a team of other users to help resolve a case.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Spring '20 and later, only users with read access to the Case object can access this object.

Fields

Field	Details
`MemberId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the user or contact who is a member on a case team.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the case with which the case team member is associated.
`TeamRoleId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the case team role with which the case team member is associated.
`TeamTemplateId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the predefined team with which the case team member is associated.
`TeamTemplateMemberId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the team member included in a predefined case team.

CaseTeamRole

Represents a case team role. Every case team member has a role on a case, such as “Customer Contact” or “Case Manager.”

Supported Calls

`create()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Spring '20 and later, only users with read access to the Case object can access this object.

Fields

Field	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of access granted to the target Group for cases. The possible values are: • `None` • `Read` • `Edit`
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the case team role.
`PreferencesVisibleInCSP`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates whether or not the case team role is visible to Customer Portal users.

CaseTeamTemplate

Represents a predefined case team, which is a group of users that helps resolve a case.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Spring '20 and later, only users with read access to the Case object can access this object.

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A text description of the predefined case team.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the predefined case team.

CaseTeamTemplateMember

Represents a member on a predefined case team, which is a group of users that helps resolve cases.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Spring '20 and later, only users with read access to the Case object can access this object.

Fields

Field	Details
`MemberId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the user or contact who is a team member on a predefined case team.
`TeamRoleId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the predefined case team member's case team role.
`TeamTemplateId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the predefined case team's template.

CaseTeamTemplateRecord

The CaseTeamTemplateRecord object is a linking object between the Case and CaseTeamTemplate objects. To assign a predefined case team to a case (customer inquiry), create a CaseTeamTemplateRecord record and point the `ParentId` to the case and the `TeamTemplateId` to the predefined case team.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

As of Spring '20 and later, only users with read access to the Case object can access this object.

Fields

Field	Details
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the case with which the case team template record is associated.
`TeamTemplateId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the predefined case team with which the case team template record is associated.

CategoryData

Represents a logical grouping of Solution records.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`CategoryNodeId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the CategoryNode associated with the solution.

Field	Details
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`RelatedSobjectId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the solution related to the category.

Usage

This object allows you to assign one or more categories to a Solution. It is an intermediate data table with two foreign keys that defines the relationship between a CategoryNode and a Solution record.

CategoryData has two foreign keys:

- The first foreign key, `CategoryNodeId`, refers to the ID of a CategoryNode.
- The other foreign key, `RelatedSobjectId`, refers to a Solution ID.

This is a many-to-many relationship, so there can be multiple rows returned with a `CategoryNodeId`. A Solution can be associated with multiple categories.

SEE ALSO:

Object Basics

CategoryNode

Represents a tree of Solution categories.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- Customer Portal users can't access this object.

- Attempting to delete a CategoryNode that has children (referred by CategoryNode.Parent), or is referred to elsewhere, causes a failure.

Fields

Field	Details
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label for the category node.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the parent of this node, if any.
`SortOrder`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates the sort order of child CategoryNode objects.
`SortStyle`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Indicates whether the sort order is alphabetical or custom.

Usage

A CategoryNode defines a category of solutions. In the user interface, you can edit category definitions from Setup by entering *`Solution Categories`* in the `Quick Find` box, then selecting **Solution Categories**.

SEE ALSO:

CategoryData

Solution

CategoryNodeLocalization

When the Translation Workbench is enabled for your organization, the CategoryNodeLocalization object provides the translation of the label of a solution category.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- Your organization must be using Professional, Enterprise, Developer, Unlimited, or Performance Edition and be enabled for the Translation Workbench.
- To view this object, you must have the "View Setup and Configuration" permission.

Fields

Field	Details
`CategoryNodeId`	**Type** reference **Properties** Create, Filter, Nillable **Description** The ID of the solution CategoryNode that is being translated.
`LanguageLocaleKey`	**Type** picklist **Properties** Create, Filter, Nillable, Restricted picklist **Description** This field is available in API version 16.0 and earlier. It is the same as the `Language` field.
`Language`	**Type** picklist **Properties** Create, Filter, Nillable, Restricted picklist **Description** This field is available in API version 17.0 and later. The combined language and locale ISO code, which controls the language for labels displayed in an application. This picklist contains the following fully-supported languages:

Field	Details
	• Chinese (Simplified): `zh_CN` • Chinese (Traditional): `zh_TW` • Danish: `da` • Dutch: `nl_NL` • English: `en_US` • Finnish: `fi` • French: `fr` • German: `de` • Italian: `it` • Japanese: `ja` • Korean: `ko` • Norwegian: `no` • Portuguese (Brazil): `pt_BR` • Russian: `ru` • Spanish: `es` • Spanish (Mexico): `es_MX` Spanish (Mexico) defaults to Spanish for customer-defined translations. • Swedish: `sv` • Thai: `th` The Salesforce user interface is fully translated to Thai, but Help is in English. The following end-user only languages are available. • Arabic: `ar` • Bulgarian: `bg` • Croatian: `hr` • Czech: `cs` • English (UK): `en_GB` • Greek: `el` • Hebrew: `iw` • Hungarian: `hu` • Indonesian: `in` • Polish: `pl` • Portuguese (European): `pt_PT` • Romanian: `ro` • Slovak: `sk` • Slovenian: `sl` • Turkish: `tr` • Ukrainian: `uk` • Vietnamese: `vi`

Field	Details
	The following platform languages are available for organizations that use Salesforce exclusively as a platform. • Albanian: sq • Afrikaans: af • Amharic: am • Arabic (Algeria): ar_DZ • Arabic (Bahrain): ar_BH • Arabic (Egypt): ar_EG • Arabic (Iraq): ar_IQ • Arabic (Jordan): ar_JO • Arabic (Kuwait): ar_KW • Arabic (Lebanon): ar_LB • Arabic (Libya): ar_LY • Arabic (Morocco): ar_MA • Arabic (Oman): ar_OM • Arabic (Qatar): ar_QA • Arabic (Saudi Arabia): ar_SA • Arabic (Sudan): ar_SD • Arabic (Syria): ar_SY • Arabic (Tunisia): ar_TN • Arabic (United Arab Emirates): ar_AE • Arabic (Yemen): ar_YE • Armenian: hy • Basque: eu • Bosnian: bs • Bengali: bn • Burmese: my • Catalan: ca • Chinese (Hong Kong): zh_HK • Chinese (Singapore): zh_SG • Dutch (Belgium): nl_BE • English (Australia): en_AU • English (Canada): en_CA • English (Hong Kong): en_HK • English (India): en_IN • English (Ireland): en_IE • English (Malaysia): en_MY • English (New Zealand): en_NZ

Field	Details
	• English (Philippines): en_PH • English (Singapore): en_SG • English (South Africa): en_ZA • Estonian: et • Farsi: fa • French (Belgium): fr_BE • French (Canada): fr_CA • French (Luxembourg): fr_LU • French (Switzerland): fr_CH • Georgian: ka • German (Austria): de_AT • German (Belgium): de_BE • German (Luxembourg): de_LU • German (Switzerland): de_CH • Gujarati: gu • Hindi: hi • Icelandic: is • Irish: ga • Italian (Switzerland): it_CH • Kannada: kn • Khmer: km • Latvian: lv • Lithuanian: lt • Luxembourgish: lb • Macedonian: mk • Malay: ms • Malayalam: ml • Maltese: mt • Marathi: mr • Montenegrin: sh_ME • Romanian (Moldova): ro_MD • Romansh: rm • Serbian (Cyrillic): sr • Serbian (Latin): sh • Spanish (Argentina): es_AR • Spanish (Bolivia): es_BO • Spanish (Chile): es_CL • Spanish (Colombia): es_CO

Field	Details
	• Spanish (Costa Rica): `es_CR` • Spanish (Dominican Republic): `es_DO` • Spanish (Ecuador): `es_EC` • Spanish (El Salvador): `es_SV` • Spanish (Guatemala): `es_GT` • Spanish (Honduras): `es_HN` • Spanish (Nicaragua): `es_NI` • Spanish (Panama): `es_PA` • Spanish (Paraguay): `es_PY` • Spanish (Peru): `es_PE` • Spanish (Puerto Rico): `es_PR` • Spanish (United States): `es_US` • Spanish (Uruguay): `es_UY` • Spanish (Venezuela): `es_VE` • Swahili: `sw` • Tagalog: `tl` • Tamil: `ta` • Te reo: `mi` • Telugu: `te` • Urdu: `ur` • Welsh: `cy` • Xhosa: `xh` • Zulu: `zu` The values in this field are not related to the default locale selection.
`NamespacePrefix`	**Type** string **Properties** Filter, Nillable **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer.

Field	Details
	• In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
`Value`	**Type** string **Properties** Create, Filter, Nillable, Update **Description** The actual translated label for the solution category. Label is **Translation**.

Usage

Use this object to translate the labels of your solution categories into a supported language. Users with the Translation Workbench enabled can view category node translations, but either the "Customize Application," "Manage Translation," or "Manage Categories" permission is required to create or update category node translations.

SEE ALSO:

ScontrolLocalization

WebLinkLocalization

ChannelObjectLinkingRule

Represents a rule for linking a channel interaction with an object (such as Lead or Contact). This object is available in API version 47.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`ActionForNoRecordFound`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Action to take when no matching records are found. Possible values are:

Field	Details
	• `CreateNewRecordAndLink`—Create Record and Link (Recommended) • `PromptAgent`—Prompt Agent
`ActionForSingleRecordFound`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Action to take when one matching record is found. Possible values are: • `AutoLink`—Auto-Link Record (Recommended) • `PromptAgent`—Prompt Agent
`ChannelType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The type of channel used for this rule. Possible values are: • `FacebookMessenger` • `Phone` • `Text` • `WeChat` • `WhatsApp`
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** The description for this linking rule.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores.

Field	Details
	In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. **Note:** When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`IsLinkedRecordOpenedAsSubTab`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether to open the linked record as a subtab when the link is established.
`IsRuleActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the rule is active.
`Language`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language for this linking rule. Possible values are: • `ar`—Arabic • `bg`—Bulgarian • `cs`—Czech • `da`—Danish • `de`—German • `el`—Greek • `en_GB`—English (UK) • `en_US`—English • `es`—Spanish • `es_MX`—Spanish (Mexico) • `fi`—Finnish • `fr`—French

Field	Details
	• `hr`—Croatian • `hu`—Hungarian • `in`—Indonesian • `it`—Italian • `iw`—Hebrew • `ja`—Japanese • `ko`—Korean • `nl_NL`—Dutch • `no`—Norwegian • `pl`—Polish • `pt_BR`—Portuguese (Brazil) • `pt_PT`—Portuguese (European) • `ro`—Romanian • `ru`—Russian • `sk`—Slovak • `sl`—Slovene • `sv`—Swedish • `th`—Thai • `tr`—Turkish • `uk`—Ukrainian • `vi`—Vietnamese • `zh_CN`—Chinese (Simplified) • `zh_TW`—Chinese (Traditional)
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique label name for this rule.
`ObjectToLink`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The type of object to link to the channel interaction. Possible values are: • `Contact`

Field	Details
`RuleName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Name of the rule as it appears in the UI. Maximum length is 80 characters.

ChannelProgram

Represents a channel program that vendors use to market and sell their products through channel partners. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Fields

Field Name	Details
`Category`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Category of the channel program. Categories group channel programs by type. For example, a reseller category would include all the different regional reseller channel programs.
`Description`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of the channel program.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field Name	Details
	Description Indicates whether the channel program is active. New channel programs are inactive by default.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (`LastReferencedDate`) but not viewed it.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Name of the channel program.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner of the channel program.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ChannelProgramFeed
Feed tracking is available for the object.

ChannelProgramHistory
History is available for tracked fields of the object.

ChannelProgramOwnerSharingRule
Sharing rules are available for the object.

ChannelProgramShare
Sharing is available for the object.

ChannelProgramLevel

Represents a level, based on member experience, in a channel program. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of the channel program level.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (`LastReferencedDate`) but not viewed it.

Field Name	Details
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Name of the channel program level.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Required. ID of the user who is the owner of the record.
ProgramId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the channel program.
Rank	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An integer associated with the level. For example, 1 represents the lowest level, 2 the next level up, etc.
RecordTypeId	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the record type assigned to this object.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ChannelProgramLevelFeed
Feed tracking is available for the object.

ChannelProgramLevelHistory
History is available for tracked fields of the object.

ChannelProgramLevelOwnerSharingRule
Sharing rules are available for the object.

ChannelProgramLevelShare (API version 43.0)
Sharing is available for the object.

ChannelProgramMember

Represents a partner who is a member of a channel program. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Most recent date referenced. This field is available in API version 45.0 and later.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Most recent date viewed. This field is available in API version 45.0 and later.
`LevelId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the channel program level.
`Name`	**Type** string

Field Name	Details
	Properties Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** Name of the channel program member.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Required. ID of the user who is the owner of the record.
`PartnerId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the partner.
`ProgramId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the channel program.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ChannelProgramMemberFeed (API version 46.0)
Feed tracking is available for the object.

ChannelProgramMemberHistory (API version 46.0)
History is available for tracked fields of the object.

ChannelProgramMemberOwnerSharingRule
Sharing rules are available for the object.

ChannelProgramMemberShare (API version 43.0)
Sharing is available for the object.

ChatterActivity

ChatterActivity represents the number of posts and comments made by a user and the number of comments and likes on posts and comments received by the same user. This object is available in API version 23.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments made by the ParentId.
`CommentReceivedCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments received by the ParentId.
`InfluenceRawRank`	**Type** int **Properties** Filter, Group, Sort **Description** Number indicating the ParentId's Chatter influence rank, which is calculated based on the ParentId's ChatterActivity statistics, relative to the other users in the organization. This field is available in API version 26.0 and later.
`LikeReceivedCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes received by the ParentId.

Field Name	Details
`NetworkId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the Experience Cloud site to which the ChatterActivity belongs. This field is available only if digital experiences is enabled in your org. This field is available in API version 26.0 and later.
`ParentId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the object type to which the ChatterActivity is related. In API version 51.0, the `ParentId` must be a `UserId` or SelfServiceUser ID.
`PostCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedItems made by the ParentId.

Usage

- Use this object to reference the Chatter activity statistics, which include the number of posts and comments made by a user and the number of comments and likes on posts and comments received by the same user.
- You can directly query for ChatterActivity.

```
SELECT Id, PostCount, LikeReceivedCount
FROM ChatterActivity
WHERE ParentId = UserId
```

  Note: To query ChatterActivity, you must provide the `ParentId`. In API version 51.0, the `ParentId` must be a `UserId` or SelfServiceUser ID.

- A ChatterActivity record is created for users the first time they post or comment. Users who have never posted or commented don't have ChatterActivity records. If users make only one post and then delete it, they do have ChatterActivity records. In both cases, the user interface displays zeros for their Chatter activity.

- Use the `InfluenceRawRank` field to reference a user's Chatter influence rank. This field is available in API version 26.0 and later.

SEE ALSO:

FeedItem

FeedComment

FeedLike

ChatterAnswersActivity

Represents the reputation of a User in Chatter Answers zones.This object is available in API version 25.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`BestAnswerReceivedCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of best answers the User has received from other users.
`BestAnswerSelectedCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of best answers the User has selected.
`QuestionsCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of Question records posted by the User.
`QuestionSubscrCount`	**Type** int

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The number of Question records the User has selected to follow.
`QuestionSubscrReceivedCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of users following Question records posted by the User.
`QuestionUpVotesCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of up votes the User has marked on Question records posted by other users.
`QuestionUpVotesReceivedCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of up votes the User has received from other users on the Question records he or she has posted.
`RepliesCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of Reply records posted by the User.
`ReplyDownVotesCount`	**Type** int **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The number of down votes the User has marked on Reply records posted by other users.
`ReplyDownVotesReceivedCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of down votes the User has received from other users on the Reply records he or she has posted.
`ReplyUpVotesCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of up votes the User has marked on the Reply records posted by other users.
`ReplyUpVotesReceivedCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of up votes the User has received from other users on the Reply records he or she has posted.
`ReportAbuseOnQuestionsCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of abuses that the User has reported on Question records posted by other users.
`ReportAbuseOnRepliesCount`	**Type** int **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The number of abuses that the User has reported on Reply records posted by other users.
`ReportAbuseReceivedOnQnCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of abuses reported by other users on the Question records posted by the User.
`ReportAbuseReceivedOnReCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** the number of abuses reported by other users on the Reply records posted by the User.
`UserId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The User ID associated with this reputation.
`CommunityId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID for the zone associated with this reputation.

Usage

Use this object to view metrics on User activity in Chatter Answers. For example, you can use the ChatterAnswersActivity object to view the number of Question records a user is following in Chatter Answers zones.

SEE ALSO:

Question

Reply

User

ChatterAnswersReputationLevel

Represents a reputation level within a Chatter Answers zone. This object is available in API version 26.0 and later.

Supported Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`

Fields

Field	Details
`CommunityID`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the zone for which you're creating the reputation level.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Name of the reputation level.
`Value`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** Minimum number of points for this level.

Usage

Use to create or edit reputation levels for the zone.

ChatterConversation

Represents a private conversation in Chatter, consisting of messages that conversation members have sent or received. This object is available in API version 23.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Id`	**Type** ID **Properties** Defaulted on create, Filter, Group, Sort **Description** ID of the conversation.

Usage

Use this object to identify private conversations in Chatter. Users can access this object if they have the Manage Chatter Messages and Direct Messages permission. This object is read-only via the API and is provided only to allow administrators to view users' Chatter messages; for example, for compliance purposes.

SEE ALSO:

ChatterConversationMember

ChatterMessage

ChatterConversationMember

Represents a member of a private conversation in Chatter. A member has either sent messages to or received messages from other conversation participants. This object is available in API version 23.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
ConversationId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the associated ChatterConversation.
MemberId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the conversation member.

Usage

Use this object to view members of private conversations in Chatter. Users can access this object if they have the Manage Chatter Messages and Direct Messages permission. This object is read-only via the API and is provided only to allow administrators to view users' Chatter messages; for example, for compliance purposes.

SEE ALSO:

ChatterConversation

ChatterMessage

ChatterExtension

Represents a Rich Publisher App that's integrated with the Chatter publisher. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
CompositionComponentEnumOrId	**Type** picklist

Field	Details
	Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The ID of the composition component for the Rich Publisher App. This field requires a value.
Description	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The description of your custom Rich Publisher App. This field requires a value.
DeveloperName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the developer who is responsible for the app.
ExtensionName	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of your extension. This field requires a value.
HeaderText	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The text to show in the header of your app composer. Header text is required for Lightning type extensions.
HoverText	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The text to show when a user mouses over your extension's icon. Mouse-over text is required for Lightning type extensions.

Field	Details
`IconId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The icon to show in the Chatter publisher. Use an existing file asset ID from your org. This field requires a value.
`IsProtected`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** An auto-generated value. It currently has no impact.
`Language`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language used for this instance of the `ChatterExtension`. This field requires a value.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The master label for the `ChatterExtension` object. This field requires a value.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The prefix to use for the extension's namespace.
`RenderComponentEnumOrId`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update

Field	Details
	Description The rendering component of the Rich Publisher App that you provide. It's comprised of the `lightning:availableForChatterExtensionRenderer` interface. This field requires a value.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Describes the type of the extension. Currently, the only value supported is *`Lightning`*. Included to allow for other possible types in the future.

ChatterExtensionConfig

Configuration for the Chatter extension for Experience Cloud sites. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`CanCreate`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Determines whether the `ChatterExtension` can create an instance that appears by rendering.
`CanRead`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Determines whether the `ChatterExtension` can be viewed.

Field	Details
ChatterExtensionId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the ChatterExtension.
NetworkId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the Experience Cloud site where the ChatterExtension is deployed.
Position	**Type** int **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The position of the ChatterExtension icon in the Chatter publisher.

ChatterMessage

Represents a message sent as part of a private conversation in Chatter. This object is available in API version 23.0 and later.

Supported Calls

delete(), describeSObjects(), query(), retrieve(), update()

Fields

Field Name	Details
Body	**Type** textarea **Properties** Update **Description** Text of the message.

Field Name	Details
ConversationId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the conversation that the message is associated with.
SenderId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the sender.
SenderNetworkId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the Experience Cloud site from which the message was sent. This field is available only if digital experiences is enabled in your org. This field is available in API version 32.0 and later.
SentDate	**Type** dateTime **Properties** Filter, Sort **Description** Date the message was sent.

Usage

Use this object to view and delete messages sent or received via private conversations in Chatter. Users can access this object if they have the Manage Chatter Messages and Direct Messages permission. Users with the Moderate Experiences Chatter Messages permission can access this object in Experience Cloud sites they're a member of, only if the message has been flagged as inappropriate. This object is provided to allow administrators to view and delete users' Chatter messages, for example, for compliance purposes.

Messages are hard deleted. That is, they're removed completely without a trip to the Recycle Bin.

Deleting a message that resulted from sharing a file with someone doesn't also delete the file.

SEE ALSO:

ChatterConversation

ChatterConversationMember

ClientBrowser

Represents a cookie added to the browser upon login, and also includes information about the browser application where the cookie was inserted. This object is available in version 28.0 and later.

Supported Calls

`describeSObjects()`, `delete()`, `query()`, `retrieve()`

Fields

Field	Details
`FullUserAgent`	**Type** string **Properties** Filter, Nillable, Sort **Description** Detailed information about the client (browser). For example, `Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.9.0.1) Gecko/2008070208 Firefox/3.0.1`
`LastUpdate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Represents the last time the cookie was changed.
`ProxyInfo`	**Type** string **Properties** Filter, Nillable, Sort **Description** The browser's current proxy information.

Field	Details
`UsersId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the user associated with this item.

Usage

At every login, the device the login request is from is checked against the known devices using ClientBrowser. A match means a cookie was found on the browser that matches an entry in the ClientBrowser table, so the device is known. No match means that no matching cookie was found, so the device is unknown, and the user is asked to confirm their identity.

CollaborationGroup

Represents a Chatter group. This object is available in API version 19.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

The visibility of information in groups depends on the type of group and the user's permissions.

- **Members**: Any user with the Create and Own New Chatter Groups permission can create public, private, and unlisted groups, including in any Experience Cloud sites they belong to.
- **Owners and managers**: Users can modify group details for any group they own or manage. Owners can also delete groups they own.
- **Nonmembers**: These user permissions allow group access regardless of group membership.
  - View All Data—Allows users to view all public and private groups across their org and its Experience Cloud sites. Users with this permission can't view unlisted group information, unless they have the Modify Unlisted Groups permission as well.
  - Modify All Data—Allows users to view, modify, and delete all public and private groups across their org and its Experience Cloud sites. Users with this permission can't view or modify unlisted group information, unless they have the Manage Unlisted Groups permission as well.
  - Create and Set Up Experiences—Allows users to view, modify, and delete all public and private groups in Experience Cloud sites.
  - Manage Unlisted Groups—Allows users to search for, access, and modify any unlisted group in an org and its Experience Cloud sites.
  - Data Export—Allows users to export any data from Salesforce, including private and unlisted group data from an org and its Experience Cloud sites.

- **Apex and Visualforce**: Apex code runs in system mode, which means that the permissions of the current user aren't taken into account.
  - Visualforce pages that display groups might expose unlisted or private group data to users who aren't members.
  - Because system mode disregards the user's permissions, all users who are accessing a Visualforce page that's showing a group can act as an owner of that group.
  - AppExchange apps that are written in Apex and that access all groups will expose unlisted groups to users who aren't members.

To limit and manage access to the unlisted and private groups in your org:

- Explicitly filter out unlisted and private group information from SOQL queries in all Apex code.
- Use permission sets, profile-level permissions, and sharing checks in your code to further limit group access.
- Use Apex triggers on the CollaborationGroup object to monitor and manage the creation of groups. In Setup, enter *`Group Triggers`* in the `Quick Find` box, then select **Group Triggers** to add triggers.

Fields

Field	Details
`AnnouncementId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Contains the ID of the Announcement last associated with the group. This field is available in API version 30.0 and later.
`BannerPhotoUrl`	**Type** url **Properties** Filter, Nillable, Sort **Description** The URL for the group's banner photo. The URL is updated every time a photo is uploaded and reflects the most recent photo. If a newer photo has been uploaded, the URL returned for an older photo is not guaranteed to return a photo. Query this field for the URL of the most recent photo. This field is available in API version 36.0 and later.
`CanHaveGuests`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** If set to `true`, indicates that a group allows customers. Chatter customers are people outside your company's email domains. Customers can see only the groups they're invited to. They

Field	Details
	can interact only with members of those groups. Customers can't see any Salesforce information. This field is available starting in API version 23.0, but groups that allow customers are accessible from earlier API versions. However, when accessed from earlier API versions, groups that allow customers aren't distinguishable from private groups. We strongly recommend that you upgrade to the latest API version. If you must use an earlier version, name groups that allow customers to indicate that they include customers.
`CollaborationType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of Chatter group. Available values are: • `Public`—Anyone can see and post updates. Anyone can join a public group. • `Private`—Only members can see the group feed and post updates. Non-members can only see the group name and a few other details in list views, search, and on the group page. The group's owner or managers must add members who request to join the group. • `Unlisted`—Only members and users with the Manage Unlisted Groups permission can see the group and post updates. Other users can't access the group or see it in lists, search, and feeds.
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the group.
`FullPhotoUrl`	**Type** url **Properties** Filter, Nillable, Sort **Description** The URL for the group's profile photo. The URL is updated every time a photo is uploaded and reflects the most recent photo. If a newer photo has been uploaded, the URL returned for an older photo is not guaranteed to return a photo. Query this field for the URL of the most recent photo. This field is available in API version 20.0 and later.

Field	Details
`GroupEmail`	**Type** email **Properties** Nillable, Sort **Description** The email address for posting to the group. For private groups, only visible to members and users with Modify All Data or View All Data permissions. This field is available in API version 29.0 and later.
`HasPrivateFieldsAccess`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If set to `true`, indicates that a user can see the `InformationBody` and `InformationTitle` fields in a private group. This field is set to `true` for members of a private group and users with Modify All Data or View All Data permissions.
`InformationBody`	**Type** textarea **Properties** Create, Nillable, Update **Description** The text of the Information section. For private groups, only visible to members and users with Modify All Data or View All Data permissions.
`InformationTitle`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The title of the Information section. For private groups, only visible to members and users with Modify All Data or View All Data permissions.
`IsArchived`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the group is archived (`true`) or not (`false`). This field is available in API version 28.0 and later.

Field	Details
IsAutoArchiveDisabled	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether automatic archiving is disabled for the group (`true`) or not (`false`). This field is available in API version 29.0 and later.
IsBroadcast	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the group is a broadcast group (`true`) or not (`false`). This field is available in API version 36.0 and later.
LastFeedModifiedDate	**Type** dateTime **Properties** Filter, Sort **Description** The date of the last post or comment on the group.
LastReferencedDate	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
MediumPhotoUrl	**Type** url

Field	Details
	Properties Filter, Nillable, Sort **Description** The URL for the larger, cropped photo size.
`MemberCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of members in the group.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Name of the group. Group names must be unique across public and private groups. Unlisted groups don't require unique names.
`NetworkId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the Experience Cloud site that this group is part of. This field is available only if digital experiences is enabled in your org. You can only add a `NetworkId` when creating a group. You can't change or add a `NetworkId` for an existing group. This field is available in API version 26.0 and later.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner of the group. Only the current group owner or people with the Modify All Data permission can update the `OwnerId`.
`SmallPhotoUrl`	**Type** url **Properties** Filter, Nillable, Sort

Field	Details
	Description The URL for a thumbnail of the group's profile photo. The URL is updated every time a photo is uploaded and reflects the most recent photo. If a newer photo has been uploaded, the URL returned for an older photo is not guaranteed to return a photo. Query this field for the URL of the most recent photo. This field is available in API version 20.0 and later.

Usage

Use this object to create, edit, or delete groups in an org or Experience Cloud site. Deleting a group permanently deletes all posts and comments to the group. It also deletes all files and links posted to the group and removes the files from other locations where they were shared.

As a Chatter group member, you can post to the group using the CollaborationGroupFeed object. As a Chatter group owner or manager, you can add or remove group members using the CollaborationGroupMember object, post announcements to the group using the Announcement object, and accept or decline requests to join private groups using the CollaborationGroupMemberRequest object. Additionally, the group owner, manager, or your Salesforce system administrator can invite people to join the group using the CollaborationInvitation object.

The Salesforce system administrator doesn't need to be a member of the group in order to send invitations using the API.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

CollaborationGroupFeed
Feed tracking is available for the object.

SEE ALSO:

CollaborationGroupMember

CollaborationGroupMemberRequest

CollaborationGroupMember

Represents a member of a Chatter group. This object is available in API version 19.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `describeLayout()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
CollaborationGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the associated CollaborationGroup.
CollaborationRole	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The role of a group member. Group owners and managers can change roles for members of their groups. The valid values are: • `Standard`—Indicates that a user is a group member. Members can post and comment in the group. • `Admin`—Indicates that a user is a group manager. Managers can post and comment, change member roles, edit group settings, add and remove members, delete posts and comments, and edit the group information field. Note: To change the group owner, use the `OwnerId` field on the CollaborationGroup object.
LastFeedAccessDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date and time when a group member last accessed the group’s feed. The value is only updated when a member explicitly consumes the group’s feed, not when the member sees group posts in other feeds, like the profile feed.
MemberId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the group member.

Field	Details
`NotificationFrequency`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Required. The frequency at which Salesforce sends Chatter group email digests to this member. Can only be set by the member or users with the “Modify All Data” permission. The valid values are: • `D`—Daily • `W`—Weekly • `N`—Never • `P`—On every post The default value is specified by the member in their Chatter email settings. In communities, the `Email on every post` option is disabled once more than 10,000 members choose this setting for the group. All members who had this option selected are automatically switched to `Daily digests`.

Usage

Use this object to view, create, and delete Chatter group members. You must be a group owner or manager to create members for private Chatter groups.

SEE ALSO:

CollaborationGroup

CollaborationGroupMemberRequest

CollaborationGroupMemberRequest

Represents a request to join a private Chatter group. This object is available in API version 21.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`CollaborationGroupId`	**Type** reference

Field	Details
	Properties Create, Filter, Group, Sort **Description** ID of the private Chatter group.
RequesterId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user requesting to join the group; must be the ID of the context user.
ResponseMessage	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** Optional message to be included in the notification email when Status is Declined.
Status	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort, Update **Description** The status of the request. Available values are: • Accepted • Declined • Pending

Usage

This object represents a request to join a private Chatter group, and can be used to accept or decline requests to join private groups you own or manage. On create, an email is sent to the owner and managers of the private group to be accepted or declined. When the Status is Accepted or Declined, an email is sent to notify the requester. When the Status is Declined, a ResponseMessage is optionally included to provide additional details.

Note the following when working with requests:

- Users with the “Modify All Data” or “View All Data” permission can view records for all groups, regardless of membership.
- A user can be a member of 300 groups. Requests to join groups count against this limit.
- Status can't be specified on create.
- You can only update a request when the Status is Pending.

- You can't delete or update a request with a `Status` of `Accepted` or `Declined`.

SEE ALSO:

CollaborationGroup
CollaborationGroupMember

CollaborationGroupRecord

Represents the records associated with Chatter groups.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`CollaborationGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the Chatter group.
`NetworkId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Optional. The ID of the Experience Cloud site that the group belongs to. Available from API version 34.0.
`RecordId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. The ID of the record associated with the Chatter group.

CollaborationInvitation

Represents an invitation to join Chatter, either directly or through a group. This object is available in API version 21.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Invitations are available if "Allow Invitations" is enabled for your organization.

Invitations are limited to your allowed domain(s) unless the invite is sent from a private group that allows customers. Allowed domains are set by the administrator.

Invitations to customers are available if "Allow Customer Invitations" is enabled for your organization. Users must have the "Invite Customers to Chatter" permission to send invitations to people outside their Chatter domain.

Fields

Field	Details
`InvitedUserEmail`	**Type** string **Properties** Create, Filter, Group, Sort **Description** The email address for the user invited to join Chatter. Label is `Invited Email`.
`InvitedUserEmailNormalized`	**Type** email **Properties** Filter, Group, Sort **Description** A normalized version of the `InvitedUserEmail` entered. Label is `Invited Email (Normalized)`.
`InviterId`	**Type** reference **Properties** Filter, Group, Sort **Description** The person that initiated the invitation.

Field	Details
`OptionalMessage`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** An optional message from the person sending the invitation to the person receiving it.
`ParentId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Used when the email address on the invitation is different than the one entered when the invitee accepts the invitation.
`SharedEntityId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group associated with this invitation. • If the invitation is to join Chatter, the `SharedEntityId` is the ID of the User that created the invitation. The invitee will auto-follow the inviter. • If the invitation is to join a group within Chatter, the `SharedEntityId` is the ID of the Chatter CollaborationGroup. • To invite a customer, set `SharedEntityId` to the ID of the private CollaborationGroup with Allow Customers turned on.
`Status`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The status of the invitation. Possible values are: • `Sent` • `Accepted` • `Canceled`

Usage

Use this object to create or delete (cancel) invitations to join Chatter. You can either invite a user to join Chatter directly or as part of a CollaborationGroup.

Note: To invite someone to join a CollaborationGroup, you must be either the owner or a manager of the group or a Salesforce system administrator.

The Salesforce system administrator doesn't need to be a member of the group in order to send invitations using the API.

When the person accepts your CollaborationGroup invitation, they join the CollaborationGroup and Chatter as well.

Note: You can't send invitations to users of the organization the invite was sent from.

Invited users can view profiles, post on their feed, and join groups, but they can't see your Salesforce data or records.

If your organization allows groups with customers, owners and managers of private groups with the "Allow Customers" setting, as well as system administrators, can use this object to invite customers.

Java Samples

The following example shows how to send an invitation to join Chatter:

```
public void invitePeople(String inviterUserId, String invitedEmail) throws Exception {
    CollaborationInvitation invitation = new CollaborationInvitation();
    invitation.setSharedEntityId(inviterUserId);//pass the userId of the inviter
    invitation.setInvitedUserEmail(invitedEmail);//email of the invited user
    insert(invitation);
}
```

The following example shows how to send an invitation to a customer user from a group that allows customers:

```
public void inviteToGroup(String GroupName, String invitedEmail) throws Exception {
    QueryResult qr = query("select id from collaborationgroup where name = '" +
        GroupName); //pass the group name
    String groupId = qr.getRecords()[0].getId();
    CollaborationInvitation invitation = new CollaborationInvitation();
    invitation.setSharedEntityId(groupId);//pass the groupId
    invitation.setInvitedUserEmail(invitedEmail);//email of the invited user
    insert(invitation);
}
```

Apex Samples

```
String emailAddress = 'bob@external.com';
CollaborationGroup chatterGroup = [SELECT Id
      FROM CollaborationGroup
      WHERE Name='All acme.com'
      LIMIT 1];
CollaborationInvitation inv = New CollaborationInvitation();
inv.SharedEntityId = chatterGroup.id;
inv.InvitedUserEmail = emailAddress;

try {
```

```
    Insert inv;
} catch(DMLException e){
    System.debug('There was an error with the invite: '+e);
}
```

CollabUserEngagementMetric

Represents the user engagement metrics for a Quip thread in a Quip template or document. This object is available in API version 50.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`CommentCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of comments by the user for the specified `MetricDate`.
`EditCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of edits by the user for the specified `MetricDate`.
`MetricDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date of the gathered metric.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort

Field	Details
	Description The unique name of the CollabUserEngagementMetric object.
`QuipThread`	**Type** string **Properties** Filter, Group, idLookup, Nillable, Sort **Description** The Quip thread ID.
`QuipThreadTitle`	**Type** string **Properties** Filter, Group, idLookup, Nillable, Sort **Description** The title of the Quip document, sheet, slide, and so forth.
`QuipThreadType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of Quip thread. The possible values are: • `CHAT` • `DOCUMENT` • `SHEET` • `SLIDE` • `TEMPLATE`
`QuipUser`	**Type** string **Properties** Filter, Group, idLookup, Nillable, Sort **Description** The ID of the Quip user.
`SalesforceUserId`	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The ID of the Salesforce user.
Site	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ID of the Quip site.
SourceTemplate	**Type** string **Properties** Filter, Group, idLookup, Nillable, Sort **Description** The ID of the source template.
ViewCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of views by the user for the specified MetricDate.

CollabUserEngmtRecordLink

Represents an association between a CollabUserEngagementMetric and a Salesforce record. It tracks which Salesforce record, such as an Account or Contact, is associated with the user engagement metric. This object is available in API version 50.0 and later.

Supported Calls

describeSObjects(), getDeleted(), getUpdated(), query(), retrieve()

Fields

Field	Details
MetricDate	**Type** dateTime

Field	Details
	Properties Filter, Nillable, Sort **Description** The date of the gathered metric.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The unique name of the CollabUserEngmtRecordLink object.
`ObjectType`	**Type** string **Properties** Filter, Group, idLookup, Nillable, Sort **Description** The object type of the Salesforce record, such as Account or Contact.
`ParentRecordId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the Salesforce record.
`UserEngagementMetricId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the CollabUserEngagementMetric record.

ColorDefinition

Represents the color-related metadata for a custom tab. This object is available in API version 43.0 and later.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field Name	Details
`Color`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The color described in web color RGB format—for example, “00FF00”.
`Context`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The color context, which determines whether the color is the main color (or primary) for the tab.
`DurableId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A unique virtual Salesforce ID for the color.
`TabDefinitionId`	**Type** string **Properties** Filter, Nillable, Sort **Description** The `TabDefinition` ID.
`Theme`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The icon’s theme.

CombinedAttachment

This read-only object contains all notes, attachments, Google Docs, documents uploaded to libraries in Salesforce CRM Content, and files added to Chatter that are associated with a record.

Supported Calls

`describeSObjects()`

Fields

Field Name	Details
`ContentSize`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Size of the document in bytes.
`ContentUrl`	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** URL for links and Google Docs. This field is set only for links and Google Docs, and is one of the fields that determine the `FileType`. This field is available in API version 31.0 and later.
`ExternalDataSourceName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of the external data source in which the document is stored. This field is set only for external documents that are connected to Salesforce. This field is available in API version 32.0 and later.
`ExternalDataSourceType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort

Field Name	Details
	Description Type of external data source in which the document is stored. This field is set only for external documents that are connected to Salesforce. This field is available in API version 35.0 and later.
`FileExtension`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** File extension of the document. This field is available in API version 31.0 and later.
`FileType`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Type of document, determined by the file extension.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the parent object.
`RecordType`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The parent object type.
`SharingOption`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort

Field Name	Details
	Description Controls whether or not sharing is frozen for a file. Only administrators and file owners with Collaborator access to the file can modify this field. Default is `Allowed`, which means that new shares are allowed. When set to `Restricted`, new shares are prevented without affecting existing shares. This field is available in API versions 35.0 and later.
`Title`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Title of the attached file.

Usage

Use this object to list all notes, attachments, documents uploaded to libraries in Salesforce CRM Content, and files added to Chatter for a record, such as a related list on a detail page.

To determine if an object supports the CombinedAttachment object, call `describeSObject()` on the object. For example, `describeSObject('Account')` returns all the child relationships of the Account object, including `CombinedAttachment`. You can then query the CombinedAttachment child relationship.

```
SELECT Name, (SELECT Title FROM CombinedAttachments)
FROM Account
```

You can't directly query CombinedAttachment.

CommerceEntitlementBuyerGroup

Represents the entitlement policy for a buyer group. This object is available in API version 49.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`

Special Access Rules

The CommerceEntitlementBuyerGroup object is available only if the B2B Commerce on Lightning Experience license is enabled.

Fields

Field	Details
BuyerGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The unique ID for the buyer group.
CurrencyIsoCode	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The standard code for the currency. Possible values are: • GBP—British Pound • USD—U.S. Dollar
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name of the entitlement buyer group.
PolicyId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The unique ID for the entitlement policy.

CommerceEntitlementPolicy

Represents an entitlement policy, which determines what products and prices a user can see. This object is available in API version 49.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

The CommerceEntitlementPolicy object is available only if the B2B Commerce on Lightning Experience license is enabled.

Fields

Field	Details
`CanViewPrice`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Determines whether a user can view the price of a product (`true`) or not (`false`). Default value is `false`.
`CanViewProduct`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Determines whether a user can view the product (`true`) or not (`false`). Default value is `false`.
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The standard code for the currency. Possible values are: • `GBP`—British Pound • `USD`—U.S. Dollar
`Description`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description The entitlement policy description.
IsActive	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Determines if the entitlement policy is active (`true`) or inactive (`false`). Default value is `false`.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the entitlement policy.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique ID for the entitlement policy owner.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

CommerceEntitlementPolicyOwnerSharingRule
Sharing rules are available for this object.

CommerceEntitlementPolicyShare

Represents the entitlement rule for sharing products and prices with users other than the owner. This object is available in API version 49.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

The CommerceEntitlementPolicyShare object is available only if the B2B Commerce on Lightning Experience license is enabled.

Fields

Field	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Possible values are: • `All`—Owner • `Edit`—Read/Write • `Read`—Read Only
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The unique ID of the parent entitlement policy.
`RowCause`	**Type** picklist

Field	Details
	Properties Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Possible values are: • `CompliantCollaboration`—Compliant Data Sharing • `GuestParentImplicit`—Associated guest user sharing • `GuestPersonImplicit`—Associated Guest User Sharing • `GuestRule`—Guest User Sharing Rule • `ImplicitChild`—Account Sharing • `ImplicitParent`—Associated record owner or sharing • `ImplicitPerson`—Person Contact • `Manual`—Manual Sharing • `Owner` • `Rule`—Sharing Rule • `SurveyShare`—Survey Sharing Rule • `Team`—Sales Team • `Territory`—Territory Assignment Rule • `Territory2AssociationManual`—Territory Manual • `Territory2Forecast`—Territory assignment for forecasting and reporting • `TerritoryManual`—Territory Manual • `TerritoryRule`—Territory Sharing Rule
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The unique ID of the associated user or buyer group.

CommerceEntitlementProduct

Represents the entitlement policy for a product. This object is available in API version 49.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`

Special Access Rules

The CommerceEntitlementProduct object is available only if the B2B Commerce on Lightning Experience license is enabled.

Fields

Field	Details
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The standard code for the currency. Possible values are: • `GBP`—British Pound • `USD`—U.S. Dollar
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The product entitlement policy name.
`PolicyId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The unique ID for the product entitlement policy.
`ProductId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The unique ID for the product referenced in the entitlement policy.

CommSubscription

Represents a customer's subscription preferences for a specific communication. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`DataUsePurposeId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the data use purpose record associated with the communication subscription.
`IsDefault`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates if this communication subscription is the default (`true`) or not (`false`). This field has a default value of `false`. Only one communication subscription record can be the default.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, it's possible that this record was referenced (`LastReferencedDate`) and not viewed.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update

Field	Details
	Description Required. Name of the communication subscription record.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the account owner associated with this customer.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

CommSubscriptionFeed
Feed tracking is available for the object.

CommSubscriptionHistory
History is available for tracked fields of the object.

CommSubscriptionOwnerSharingRule
Sharing rules are available for the object.

CommSubscriptionShare
Sharing is available for the object.

CommSubscriptionChannelType

Represents the engagement channel through which you can reach a customer for a communication subscription. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`CommunicationSubscriptionId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update

Field	Details
	Description ID of the associated communication subscription record.
`EngagementChannelTypeId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the associated engagement channel type record.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, it's possible that this record was referenced (`LastReferencedDate`) and not viewed.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. Name of the communication subscription channel type record.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID account owner associated with this customer.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

CommSubscriptionChannelTypeFeed
Feed tracking is available for the object.

CommSubscriptionChannelTypeHistory
History is available for tracked fields of the object.

CommSubscriptionChannelTypeOwnerSharingRule
Sharing rules are available for the object.

CommSubscriptionChannelTypeShare
Sharing is available for the object.

CommSubscriptionConsent

Represents a customer's consent to a communication subscription. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`CommSubscriptionChannelTypeId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the associated communication subscription channel type record.
`ConsentCapturedDateTime`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Required. Date when the customer's consent was captured.
`ConsentCapturedSource`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description Required. Source through which consent was captured. For example, user@example.com or www.example.com.
`ConsentGiverId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the person who gave consent to the communication subscription on behalf of the contact point. Note: If the contact point gave consent, don't use `ConsentGiverId`.
`ContactPointId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the contact point, such as an Individual or person account, associated with the communication subscription consent.
`EffectiveFromDate`	**Type** date **Properties** Create, Filter, Group, Sort, Update **Description** Required. Date when consent starts.
`EffectiveToDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Date when consent ends.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.

Field	Details
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, it's possible that this record was referenced (`LastReferencedDate`) and not viewed.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. Name of the communication subscription consent record.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the account owner associated with this customer.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

CommSubscriptionConsentFeed
Feed tracking is available for the object.

CommSubscriptionConsentHistory
History is available for tracked fields of the object.

CommSubscriptionConsentOwnerSharingRule
Sharing rules are available for the object.

CommSubscriptionConsentShare
Sharing is available for the object.

CommSubscriptionTiming

Represents a customer's timing preferences for receiving a communication subscription. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`CommSubscriptionConsentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the associated communication subscription consent record.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, it's possible that this record was referenced (`LastReferencedDate`) and not viewed.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** Required. Name of the communication subscription timing record.
`Offset`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update

Field	Details
	Description The amount of time before or after an event or the specific day of the week to communicate with the contact point. Set the unit of time in the `Unit` field. For example, if you set `Unit` as *`Week`* and `Offset` as *`-4`*, communicate with the contact point four weeks before the event. If you set `Offset` as *`4`*, communicate with the contact point four weeks after the event.
`PreferredTimeEnd`	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** End of the preferred time span in which to reach the customer.
`PreferredTimeStart`	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** Start of the preferred time span in which to reach the customer.
`PreferredTimeZone`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Time zone of the preferred time span.
`Unit`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The unit of time that works with the `Offset` field to determine the communication timing. Possible values are: • `Day` • `DayOfWeek` • `Hour` • `Month` • `Week`

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

CommSubscriptionTimingFeed
Feed tracking is available for the object.

CommSubscriptionTimingHistory
History is available for tracked fields of the object.

Community (Zone)

Represents a zone that contains Idea or Question objects.

Note: Starting with the Summer '13 release, Chatter Answers and Ideas communities were renamed to zones. In API version 28, the API object label has changed to `Zone`, but the API type is still `Community`.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`CanCreateCase`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether users can ask private questions in the zone using Chatter Answers.
`DataCategoryName`	**Type** string **Properties** Filter, Nillable, Group, Sort **Description** The data category associated with the zone.
`Description`	**Type** textarea **Properties** Filter, Nillable, Sort **Description** Text description of the zone.

Field	Details
HasChatterService	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether Chatter Answers is available in the zone.
IsActive	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the zone is active or inactive. An idea or question can only be posted to an active zone.
IsPublished	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the zone is available in portals.
Name	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The name of the zone.
NetworkId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the Experience Cloud site that this zone is associated with. This field is available only if digital experiences is enabled in your org. This field is available in API version 51.0 and later.

Usage

Use this object to create a zone in Ideas, Chatter Answers, or Answers. Zones help organize ideas and questions into logical groups and are shared by the Ideas, Answers, and Chatter Answers.

ConnectedApplication

Represents a connected app and its details; all fields are read-only.

Connected apps link client applications, third-party services, other Salesforce organizations, apps, and resources to your organization. The connected app configuration specifies authorization and security settings for these resources. This object exposes the settings for a specified connected app.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`MobileSessionTimeout`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Length of time after which the system logs out inactive mobile users.
`MobileStartUrl`	**Type** url **Properties** Filter, Nillable, Sort **Description** Users are directed to this URL after they've authenticated when the app is accessed from a mobile device.
`Name`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The unique name for this object.
`OptionsAllowAdminApprovedUsersOnly`	**Type** boolean **Properties** Filter

Field Name	Details
	Description Indicates whether access is limited to users granted approval to use the connected app by an administrator. Manage profiles for the app by editing each profile's Access list.
`OptionsFullContentPushNotifications`	For internal use only.
`OptionsHasSessionLevelPolicy`	**Type** boolean **Properties** Filter **Description** Specifies whether the connected app requires a High Assurance level session.
`OptionsIsInternal`	For internal use only.
`OptionsRefreshTokenValidityMetric`	**Type** boolean **Properties** Filter **Description** Specifies whether the refresh token validity is based on duration or inactivity. If `true`, the token validity is measured based on the last use of the token; otherwise, it is based on the token duration.
`PinLength`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** For mobile apps, this field is the PIN length requirement for users of the connected app. Valid values are `4`, `5`, `6`, `7`, or `8`.
`RefreshTokenValidityPeriod`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The duration of an authorization token until it expires in hours, months, or days as set in the connected app management page.

Field Name	Details
StartUrl	**Type** url **Properties** Filter, Nillable, Sort **Description** If the app is not accessed from a mobile device, users are directed to this URL after they've authenticated.

Consumption Rate

Consumption rates describe the billing rate for a range of usage within a consumption schedule. All consumption schedules require at least one consumption rate in order to rate usage on a usage product. This object is available in API version 45.0 and later.

The consumption rate sets a quantity-based boundary for usage and defines how much your product costs when its usage falls within that boundary. Consumption rates price usage at a per-unit fee or a flat fee across the entire range of usage.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
ConsumptionScheduleId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The consumption schedule that contains the consumption rate.
CurrencyIsoCode	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only for orgs with the multicurrency feature enabled. Possible values are: • AUD—Australian Dollar • CAD—Canadian Dollar

Field	Details
	• `GBP`—British Pound • `JPY`—Japanese Yen • `USD`—U.S. Dollar
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of the consumption rate.
`LowerBound`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The lowest quantity of usage for the consumption rate.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** Required. Default name of this record. Label is **Product Name**.
`Price`	**Type** currency **Properties** Create, Filter, Sort, Update **Description** The price for usage that falls within the consumption rate's bounds.
`PricingMethod`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** How Salesforce applies the consumption rate's price to the total quantity of usage within a usage summary. Possible values are: • `FlatFee`—Salesforce applies the rate's price to the entire quantity of usage.

Field	Details
	• `PerUnit`—Salesforce applies the rate's price to each individual quantity of usage within the usage summary.
`ProcessingOrder`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The order for processing the usage rate across multiple rates. Consumption rates are evaluated beginning with the lowest processing order.
`UpperBound`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The highest quantity of usage for the consumption rate.

Consumption Schedule

A consumption schedule organizes a set of consumption rates by which usage-based products are quoted and billed. This object is available in API version 45.0 and later.

Salesforce uses consumption schedules to group consumption rates. Your consumption schedule defines the unit of measurement and rating method for the schedule's rates. It also defines the billing frequency that Salesforce Billing uses to invoice a usage product.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`BillingTerm`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The number used with the billing term unit to determine billing frequency.

Field	Details
`BillingTermUnit`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The unit used with the billing term to determine billing frequency Possible values are: • `Month`— • `Quarter`— • `Year`—
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only for orgs with the multicurrency feature enabled. Possible values are: • `AUD`—Australian Dollar • `CAD`—Canadian Dollar • `GBP`—British Pound • `JPY`—Japanese Yen • `USD`—U.S. Dollar
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of the consumption schedule.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this record is active (`true`) or not (`false`). Label is **Active**.
`LastReferencedDate`	**Type** dateTime

Field	Details
	Properties Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (`LastReferencedDate`) but not viewed it.
MatchingAttribute	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Salesforce Billing matches usage with a consumption schedule if the records share Matching Attribute value.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. Default name of this record. Label is **Product Name**.
NumberOfRates	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of consumption rates in this consumption schedule.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description The user who owns a consumption schedule record.
RatingMethod	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A specific use case to rate usage against the schedule. This field is the controlling picklist for the Type field. Possible values are: • Tier
SBQQ__Category__c	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** This field is available only with Salesforce CPQ. You can define custom categories to organize consumption schedules in separate tabs on sales rep UI. If you do this, make sure to create a field set for each category. Possible values are: • Rates
Type	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Defines how rate tiers are calculated. Possible values are: • Range—The schedule prices only using the tier that applies to the usage quantity. • Slab—Usage within a given bound receives pricing equal to its tier's value.
UnitOfMeasure	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description A unit of measure defines how you quantify instances of usage for your usage products. For example, if your usage product is a cloud storage subscription, you could provide a value of GB for your unit of measure.
blng__BillingRule__c	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** This field is available only with Salesforce Billing. Salesforce Billing invoices usage summaries based off their related consumption schedule's billing rule.
blng__RevenueRecognitionRule__c	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** This field is available only with Salesforce Billing. Salesforce Billing recognizes usage summary revenue based off the summary's related revenue recognition rule.
blng__TaxRule__c	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** This field is available only with Salesforce Billing. Salesforce Billing taxes usage summary invoice lines based off the summary's related tax rule.

Contact

Represents a contact, which is a person associated with an account.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `merge()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can access only portal-enabled contacts.

Fields

Field	Details
AccountId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the account that’s the parent of this contact. We recommend that you update up to 50 contacts simultaneously when changing the accounts on contacts enabled for a Customer Portal or partner portal. We also recommend that you make this update after business hours.
AssistantName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The assistant’s name.
AssistantPhone	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The assistant’s telephone number.
Birthdate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The contact’s birthdate.

Field	Details

	Filter criteria for report filters, list view filters, and SOQL queries ignore the year portion of the `Birthdate` field. For example, this SOQL query returns contacts with birthdays later in the year than today:
	`SELECT Name, Birthdate`
	`FROM Contact`
	`WHERE Birthdate > TODAY`

`CanAllowPortalSelfReg`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this contact can self-register for your Customer Portal (`true`) or not (`false`).
`CleanStatus`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates the record's clean status as compared with Data.com. Values include: `Matched`, `Different`, `Acknowledged`, `NotFound`, `Inactive`, `Pending`, `SelectMatch`, or `Skipped`. Several values for `CleanStatus` appear with different labels on the contact record. • `Matched` appears as `In Sync` • `Acknowledged` appears as `Reviewed` • `Pending` appears as `Not Compared`
`ConnectionReceivedId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the PartnerNetworkConnection that shared this record with your organization. This field is available if you enabled Salesforce to Salesforce.
`ConnectionSentId`	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description ID of the PartnerNetworkConnection that you shared this record with. This field is available if you enabled Salesforce to Salesforce. This field is supported using API versions earlier than 15.0. In all other API versions, this field's value is null. You can use the new PartnerNetworkRecordConnection object to forward records to connections.
`Department`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The contact's department.
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** A description of the contact. Label is **Contact Description** up to 32 KB.
`DoNotCall`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates that the contact does not want to receive calls.
`Email`	**Type** email **Properties** Create, Filter, Group, idLookup, Nillable, Sort, Update **Description** The contact's email address.
`EmailBouncedDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** If bounce management is activated and an email sent to the contact bounces, the date and time of the bounce.

Field	Details
`EmailBouncedReason`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** If bounce management is activated and an email sent to the contact bounces, the reason for the bounce.
`Fax`	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The contact's fax number. Label is **Business Fax**.
`FirstCallDateTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time of the first call placed to the contact. This field is available in API version 48.0 and later if you enabled High Velocity Sales.
`FirstEmailDateTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time of the first email sent to the contact. This field is available in API version 48.0 and later if you enabled High Velocity Sales.
`FirstName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The contact's first name up to 40 characters.
`HasOptedOutOfEmail`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description Indicates whether the contact doesn't want to receive email from Salesforce (`true`) or does (`false`). Label is **Email Opt Out**.
`HasOptedOutOfFax`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the contact prohibits receiving faxes.
`HomePhone`	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The contact's home telephone number.
`IndividualId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the data privacy record associated with this contact. This field is available if Data Protection and Privacy is enabled.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`IsEmailBounced`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If bounce management is activated and an email is sent to a contact, indicates whether the email bounced (`true`) or not (`false`).

Field	Details
`IsPersonAccount`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Read only. Indicates whether this account has a record type of Person Account (`true`) or not (`false`). Label is **Is Person Account**.
`Jigsaw`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** References the company's ID in Data.com. If an account has a value in this field, it means that the account was imported from Data.com. If the field value is `null`, the account was not imported from Data.com. Maximum size is 20 characters. Available in API version 22.0 and later. Label is **Data.com Key**. Important: The `Jigsaw` field is exposed in the API to support troubleshooting for import errors and reimporting of corrected data. Do not modify this value.
`LastActivityDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Value is the most recent of either: • Due date of the most recent event logged against the record. • Due date of the most recently closed task associated with the record.
`LastName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. Last name of the contact up to 80 characters.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort

Field	Details
	Description The timestamp when the current user last accessed this record, a record related to this record, or a list view.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (`LastReferencedDate`) but not viewed it.
`LeadSource`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The lead's source.
`MailingAddress`	**Type** address **Properties** Filter, Nillable **Description** The compound form of the mailing address. Read-only. For details on compound address fields, see Address Compound Fields.
`MailingCity`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Mailing address details.
`MailingState`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Mailing address details.

Field	Details
`MailingCountry`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Mailing address details.
`MailingPostalCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Mailing address details.
`MailingStateCode`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO codes for the mailing address's state and country.
`MailingCountryCode`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO codes for the mailing address's state and country.
`MailingStreet`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Street address for mailing address.
`MailingGeocodeAccuracy`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update, Query, Restricted picklist, Nillable

Field	Details
	Description Accuracy level of the geocode for the mailing address. For details on geolocation compound field, see Compound Field Considerations and Limitations.
MailingLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `MailingLongitude` to specify the precise geolocation of a mailing address. Acceptable values are numbers between –90 and 90 up to 15 decimal places. For details on geolocation compound fields, see Compound Field Considerations and Limitations.
MailingLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `MailingLatitude` to specify the precise geolocation of a mailing address. Acceptable values are numbers between –180 and 180 up to 15 decimal places. For details on geolocation compound fields, see Compound Field Considerations and Limitations.
MasterRecordId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** If this record was deleted as the result of a merge, this field contains the ID of the record that remains. If this record was deleted for any other reason, or has not been deleted, the value is `null`.
MiddleName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The contact's middle name up to 40 characters. To enable this field, ask Salesforce Customer Support for help.
MobilePhone	**Type** phone

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** Contact's mobile phone number.
`Name`	**Type** string **Properties** Filter, Group, Sort **Description** Concatenation of `FirstName`, `MiddleName`, `LastName`, and `Suffix` up to 203 characters, including whitespaces.
`OtherAddress`	**Type** address **Properties** Filter, Nillable **Description** The compound form of the other address. Read-only. For details on compound address fields, see Address Compound Fields.
`OtherCity`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Alternate address details.
`OtherCountry`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Alternate address details.
`OtherPostalCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Alternate address details.

Field	Details
OtherState	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Alternate address details.
OtherCountryCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO codes for the alternate address's state and country.
OtherStateCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO codes for the alternate address's state and country.
OtherGeocodeAccuracy	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Accuracy level of the geocode for the other address. For details on geolocation compound fields, see Compound Field Considerations and Limitations.
OtherLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `OtherLongitude` to specify the precise geolocation of an alternate address. Acceptable values are numbers between –90 and 90 up to 15 decimal places. For details on geolocation compound fields, see Compound Field Considerations and Limitations.
OtherLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update

Field	Details
	Description Used with `OtherLatitude` to specify the precise geolocation of an alternate address. Acceptable values are numbers between –180 and 180 up to 15 decimal places. For details on geolocation compound fields, see Compound Field Considerations and Limitations.
`OtherPhone`	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Telephone for alternate address.
`OtherStreet`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Street for alternate address.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the owner of the account associated with this contact.
`Phone`	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Telephone number for the contact. Label is **Business Phone**.
`PhotoUrl`	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** Path to be combined with the URL of a Salesforce instance (*Example:* https://*`yourInstance`*.salesforce.com/) to generate a URL to request the social network profile image associated with the contact. Generated URL returns an HTTP redirect (code 302) to the social network profile image for the contact.

Field	Details
	Empty if Social Accounts and Contacts isn't enabled or if Social Accounts and Contacts is disabled for the requesting user.
`RecordTypeId`	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the record type assigned to this object.
`ReportsToId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** This field doesn’t appear if `IsPersonAccount` is `true`.
`Salutation`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Honorific abbreviation, word, or phrase to be used in front of name in greetings, such as Dr. or Mrs.
`Suffix`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Name suffix of the contact up to 40 characters. To enable this field, ask Salesforce Customer Support for help.
`Title`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Title of the contact, such as CEO or Vice President.

Note: If you are importing contact data and need to set the value for an audit field, such as `CreatedDate`, contact Salesforce. Audit fields are automatically updated during API operations unless you request to set these fields yourself..

Usage

Use this object to manage individual people who are associated with an account. You can create, query, delete, or update any attachment associated with a contact.

Create or update contacts by converting a lead with the `convertLead()` call.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ContactFeed (API version 18.0)
Feed tracking is available for the object.

ContactHistory (API version 11.0)
History is available for tracked fields of the object.

ContactOwnerSharingRule
Sharing rules are available for the object.

ContactShare
Sharing is available for the object.

SEE ALSO:

Object Basics

ContactCleanInfo

Stores the metadata Data.com Clean uses to determine a contact record's clean status. Helps you automate the cleaning or related processing of contact records. ContactCleanInfo includes a number of bit vector fields.

Note: When your Data.com Prospector or Data.com Clean contract expires, Data.com features, objects, and fields will be removed from your org.

To support customers' needs around compliance and to remain a leader in trust and privacy, Salesforce removed all contact data from the Data.com service on February 1, 2021.

For more information, see Data.com Prospector and Clean Retirement.

Contact Clean Info provides a snapshot of the data in your Salesforce contact record and its matched Data.com record at the time the Salesforce record was cleaned.

Contact Clean Info includes a number of bit vector fields, whose component fields each correspond to individual object fields and provide related data or status information about those fields. For example, the bit vector field `IsDifferent` has an `IsDifferentEmail` field. If the `IsDifferentEmail` field's value is `False`, that means the `Email` field value is *the same* on the Salesforce contact record and its matched Data.com record.

ContactCleanInfo bit vector fields include:

- `CleanedBy` indicates who (a user) or what (a Clean job) cleaned the contact record.

- `IsDifferent` indicates whether or not a field on the contact record has a value that differs from the corresponding field on the matched Data.com record.
- `IsFlaggedWrong` indicates whether or not a field on the contact record has a value that is flagged as wrong to Data.com.
- `IsReviewed` indicates whether or not a field on the contact record is in a `Reviewed` state, which means that the value was reviewed but not accepted.

Fields

Field Name	Details
`Address`	**Type** address **Properties** Filter, Nillable **Description** The compound form of the address. Read-only. See Address Compound Fields for details on compound address fields.
`City`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address of the contact.
`CleanedByJob`	**Type** boolean **Properties** Filter **Description** Indicates whether the contact record was cleaned by a Data.com Clean job (`true`) or not (`false`).
`CleanedByUser`	**Type** boolean **Properties** Filter **Description** Indicates whether the contact record was cleaned by a Salesforce user (`true`) or not (`false`).
`ContactId`	**Type** reference

Field Name	Details
	Properties Filter, Group, Sort **Description** The unique, system-generated ID assigned when the contact record was created.
ContactStatusDataDotCom	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** The status of the contact per Data.com. Values are: `Contact is Active per Data.com`, `Phone is Wrong per Data.com` , `Email is Wrong per Data.com`, `Phone and Email are Wrong per Data.com`, `Contact Not at Company per Data.com`, `Contact is Inactive per Data.com`, `Company this contact belongs to is out of business per Data.com`, `Company this contact belongs to never existed per Data.com` or `Email address is invalid per Data.com`.
Country	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address of the contact.
DataDotComID	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ID Data.com maintains for the contact.
Email	**Type** email **Properties** Filter, Group, Nillable, Sort **Description** The email address for the contact.
FirstName	**Type** string

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The contact's first name.
IsDifferentCity	**Type** boolean **Properties** Filter **Description** Indicates whether the contact's `City` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
IsDifferentCountry	**Type** boolean **Properties** Filter **Description** Indicates whether the contact's `Country` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
IsDifferentCountryCode	**Type** boolean **Properties** Filter **Description** Indicates whether the contact's `Country Code` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
IsDifferentEmail	**Type** boolean **Properties** Filter **Description** Indicates whether the contact's `Email` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
IsDifferentFirstName	**Type** boolean **Properties** Filter

Field Name	Details
	Description Indicates whether the contact's `First Name` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentLastName`	**Type** boolean **Properties** Filter **Description** Indicates whether the contact's `Last Name` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentPhone`	**Type** boolean **Properties** Filter **Description** Indicates whether the contact's `Phone` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentPostalCode`	**Type** boolean **Properties** Filter **Description** Indicates whether the contact's `Postal Code` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentState`	**Type** boolean **Properties** Filter **Description** Indicates whether the contact's `State` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentStateCode`	**Type** boolean **Properties** Filter

Field Name	Details
	Description Indicates whether the contact's `State Code` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentStreet`	**Type** boolean **Properties** Filter **Description** Indicates whether the contact's `Street` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentTitle`	**Type** boolean **Properties** Filter **Description** Indicates whether the contact's `Title` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsFlaggedWrongAddress`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the contact's `Address` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongEmail`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the contact's `Email` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongName`	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description Indicates whether the contact's `Name` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongPhone`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the contact's `Phone` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongTitle`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the contact's `Title` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsInactive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the contact has been reported to Data.com as *`Inactive`* (`true`) or not (`false`).
`IsReviewedAddress`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the contact's `Address` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedEmail`	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description Indicates whether the contact's `Email` field value is in a `Reviewed` state (`true`) or not (`false`).
IsReviewedName	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the contact's `Name` field value is in a `Reviewed` state (`true`) or not (`false`).
IsReviewedPhone	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the contact's `Phone` field value is in a `Reviewed` state (`true`) or not (`false`).
IsReviewedTitle	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the contact's `Title` field value is in a `Reviewed` state (`true`) or not (`false`).
LastMatchedDate	**Type** dateTime **Properties** Filter, Sort **Description** The date the contact record was last matched and linked to a Data.com record.
LastName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The contact's last name.

Field Name	Details
LastStatusChangedById	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of who or what last changed the record's `Clean Status` field value: a Salesforce user or a Clean job.
LastStatusChangedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date on which the record's `Clean Status` field value was last changed.
Latitude	**Type** double **Properties** Filter, Nillable, Sort **Description** Used with `Longitude` to specify the precise geolocation of a billing address. Data not currently provided.
Longitude	**Type** double **Properties** Filter, Nillable, Sort **Description** Used with `Latitude` to specify the precise geolocation of a billing address. Data not currently provided.
Name	**Type** string **Properties** Filter, Group, Sort, Update **Description** Field label is **Contact Clean Info Name**. The name of the contact. Maximum size is 255 characters.
Phone	**Type** phone

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The phone number for the contact.
`PostalCode`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address of the contact.
`State`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address of the contact.
`Street`	**Type** textarea **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address of the contact.
`Title`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The contact's title.

Usage

Developers can create triggers that read the Contact Clean Info fields to help automate the cleaning or related processing of contact records.

Create a customized set of `Title` field values. Use triggers to map values from fields on imported or cleaned records onto a standard set of values.

ContactPointAddress

Represents a contact's billing or shipping address, which is associated with an individual or person account. This object is available in API version 49.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`ActiveFromDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date when the contact's address became active.
`ActiveToDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date when the contact's address is no longer active.
`Address`	**Type** address **Properties** Filter, Nillable **Description** The full address.
`AddressType`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates the type of address. Possible values are: • `Billing`

Field	Details
	• `Shipping`
`BestTimeToContactEndTime`	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** The latest time to contact the individual.
`BestTimeToContactStartTime`	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** The earliest time to contact the individual.
`BestTimeToContactTimezone`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The timezone applied to the best time to contact the individual.
`City`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The address city.
`ContactPointPhoneId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Represents the primary phone number associated with this address.
`Country`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description The address country.
GeocodeAccuracy	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The level of accuracy of a location's geographical coordinates compared with its physical address. A geocoding service typically provides this value based on the address's latitude and longitude coordinates. Possible values are: • Address • Block • City • County • ExtendedZip • NearAddress • Neighborhood • State • Street • Unknown • Zip
IsDefault	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether a contact's address is the preferred method of communication (true) or not (false). The default value is false.
IsPrimary	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether a contact's address is their primary address (true) or not (false). The default value is false.

Field	Details
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last referenced a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, it's possible that this record was referenced (`LastReferencedDate`) and not viewed.
`Latitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `Longitude` to specify the precise geolocation of the address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
`Longitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `Latitude` to specify the precise geolocation of the address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the contact.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description The ID of the account's owner associated with this contact.
ParentId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the contact's parent record. Only an individual or account can be a contact's parent.
PostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The address postal code.
State	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The address state.
Street	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The address street.
UsageType	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Specify the usage type of this address. For instance, whether it's a work address or a home address. Possible values are: • Home • Temp

Field	Details
	• `Work`

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as the object.

ContactPointPhone
History is available for tracked fields of the object.

ContactPointEmail
Sharing rules are available for the object.

ContactPointPhoneShare
Sharing is available for the object.

ContactPointConsent

Represents a customer's consent to be contacted via a specific contact point, such as an email address or phone number. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`CaptureContactPointType`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Required. Indicates how you captured consent. Possible values are: • `Email` • `MailingAddress` • `Phone` • `Social` • `Web`

Field	Details
CaptureDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Required. Date when consent was captured.
CaptureSource	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Required. Indicates how you captured consent. For example, a website or online form.
ContactPointId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the contact point record through which the customer is consenting to be contacted.
DataUsePurposeId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the data use purpose record that you want to associate this consent with.
DoubleConsentCaptureDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Date when double opt-in was captured.
EffectiveFrom	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Date when consents starts.

Field	Details
EffectiveTo	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Date when consent ends.
EngagementChannelTypeId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the engagement channel record through which the customer is consenting to be contacted.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, it's possible that this record was referenced (`LastReferencedDate`) and not viewed.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Name of the contact point type consent record.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description ID of the account owner associated with this customer.
`PrivacyConsentStatus`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. Identifies whether the individual or person account associated with this record agrees to this form of contact. Possible values are: • `NotSeen` • `OptIn` • `OptOut` • `Seen`

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ContactPointConsentHistory
History is available for tracked fields of the object.

ContactPointConsentOwnerSharingRule
Sharing rules are available for the object.

ContactPointConsentShare
Sharing is available for the object.

ContactPointEmail

Represents a contact's email, which is associated with an individual or person account. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`ActiveFromDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date when the contact’s email became active.
`ActiveToDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date when the contact’s email is no longer active.
`BestTimeToContactEndTime`	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** The latest time to contact the individual.
`BestTimeToContactStartTime`	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** The earliest time to contact the individual.
`BestTimeToContactTimezone`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The timezone applied to the best time to contact the individual.
`EmailAddress`	**Type** email **Properties** Create, Filter, Group, Sort, Update

Field	Details
	Description Required. The email address of the contact.
`EmailDomain`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The domain of the contact’s email, which is everything after the @ sign.
`EmailLatestBounceDateTime`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date and time when an email failed to reach its recipient.
`EmailLatestBounceReasonText`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The reason why the email didn’t reach its recipient.
`EmailMailBox`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A subset of the contact’s email, which is everything before the @ sign.
`IsPrimary`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether a contact’s email is their primary email (`true`) or not (`false`).
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort

Field	Details
	Description The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, it's possible that this record was referenced (LastReferencedDate) and not viewed.
Name	**Type** string **Properties** Filter, Group, idLookup, Nillable, Sort **Description** The email of the contact.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the account's owner associated with this contact.
ParentId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the contact's parent. Only an individual or account can be a contact's parent.
UsageType	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Specify the usage type of this email. For instance, whether it's a work email or a temporary email. Possible values are: • Home

Field	Details
	• `Temp` • `Work`

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as the object.

ContactPointEmailHistory
History is available for tracked fields of the object.

ContactPointEmailOwnerSharingRule
Sharing rules are available for the object.

ContactPointEmailShare
Sharing is available for the object.

ContactPointPhone

Represents a contact's phone number, which is associated with an individual or person account. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`ActiveFromDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date when the contact's phone number became active.
`ActiveToDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date when the contact's phone number is no longer active.

Field	Details
AreaCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The area code of the phone number's location for the contact.
BestTimeToContactEndTime	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** The latest time to contact the individual.
BestTimeToContactStartTime	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** The earliest time to contact the individual.
BestTimeToContactTimezone	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The timezone applied to the best time to contact the individual.
ExtensionNumber	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The phone number extension for the contact.
FormattedInternationalPhoneNumber	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The internationally recognized format for the contact's phone number.

Field	Details
FormattedNationalPhoneNumber	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The nationally recognized format for the contact's phone number.
IsBusinessPhone	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether a contact's phone number is a business number (`true`) or not (`false`).
IsFaxCapable	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether a contact's phone number is a fax number (`true`) or not (`false`).
IsPersonalPhone	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether a contact's phone number is a personal number (`true`) or not (`false`).
IsPrimary	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether a contact's phone number is their primary number (`true`) or not (`false`).
IsSmsCapable	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description Indicates whether a contact's phone number can receive text messages (`true`) or not (`false`).
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, it's possible that this record was referenced (`LastReferencedDate`) and not viewed.
`Name`	**Type** string **Properties** Filter, Group, idLookup, Nillable, Sort **Description** The phone number for the contact.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the account's owner associated with this contact.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the contact's parent. Only an individual or account can be a contact's parent.
`PhoneType`	**Type** picklist

Field	Details
	Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The type of phone number for the contact. Possible values are: • `Home` • `Mobile`
`PreferenceRank`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Specify how this phone numbers ranks in terms of preference among the contact's other phone numbers.
`TelephoneNumber`	**Type** phone **Properties** Create, Filter, Group, Sort, Update **Description** Required. The phone number for the contact.
`UsageType`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Specify the usage type of this number. For instance, whether it's a work phone or a home phone. Possible values are: • `Home` • `Temp` • `Work`

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as the object.

ContactPointPhoneHistory
History is available for tracked fields of the object.

ContactPointPhoneOwnerSharingRule
Sharing rules are available for the object.

ContactPointPhoneShare
Sharing is available for the object.

ContactPointTypeConsent

Represents consent for a contact point type, such as email or phone. This object is available in API version 45.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is available if Data Protection and Privacy is enabled.

Fields

Field Name	Details
`CaptureContactPointType`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Required. Indicates how you captured consent. Possible values are: • `Email` • `MailingAddress` • `Phone` • `Social` • `Web`
`CaptureDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Required. Date when consent was captured.
`CaptureSource`	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** Required. Indicates how you captured consent. For example, a website or online form.
ContactPointType	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Required. Represents the contact method you want to apply consent to. Possible values are: • Email • MailingAddress • Phone • Social • Web
DataUsePurposeId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Represents the record for data use purpose that you want to associate this consent with.
DoubleConsentCaptureDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Date when double opt-in was captured.
EffectiveFrom	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Date when consents starts.

Field Name	Details
EffectiveTo	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Date when consent ends.
EngagementChannelType	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Required if a ContactPointType isn't selected. Represents the contact method you want to apply consent to. Possible values are: • Billboard • Email • MailingAddress • Phone • SMS • Social • Web
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, it's possible that this record was referenced (LastReferencedDate) and not viewed.
Name	**Type** string

Field Name	Details
	Properties Create, Filter, Group, idLookup, Sort, Update **Description** Name of the contact point type consent record.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the owner of the account associated with this customer.
`PartyId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Required. Represents the record based on the Individual object you want to associate consent with.
`PrivacyConsentStatus`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. Identify whether the individual associated with this record agrees to this form of contact. Possible values are: • `NotSeen` • `Seen` • `OptIn` • `OptOut`

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ContactPointTypeConsentHistory
History is available for tracked fields of the object.

ContactPointTypeConsentOwnerSharingRule
Sharing rules are available for the object.

ContactPointTypeConsentShare
Sharing is available for the object.

ContactOwnerSharingRule

Represents the rules for sharing a contact with a User other than the owner.

Note: To enable access to this object for your org, contact Salesforce customer support. However, we recommend that you instead use Metadata API to programmatically update owner sharing rules because it triggers automatic sharing rule recalculation. The SharingRules Metadata API type is enabled for all orgs.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`ContactAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of access granted to the target Group, UserRole, or User for Contacts. The possible values are: • `Read` • `Edit`
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters. This field is available in API version 29.0 and later.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. This field is available in API version 24.0 and later. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group. A Contact owned by a User in the source Group triggers the rule to give access.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the User or Group being granted access.

Usage

Use this object to manage the sharing rules for contacts.

SEE ALSO:

Contact

ContactShare

Metadata API Developer Guide: SharingRules

ContactRequest

Represents a customer's request for support to get back to them about an issue. This object is available in API version 45.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort

Field Name	Details
	Description The contact request number.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the Salesforce record that owns the request.
PreferredChannel	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The channel the customer selected as their preferred method of communication in the contact request flow. For example: • Phone
PreferredPhone	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The phone number the customer provided when requesting help in the contact request flow.
RequestDescription	**Type** textarea **Properties** Create, Nillable, Update **Description** The description of the customer's issue that they provided when requesting help in the contact request flow.
RequestReason	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The reason the customer provided when requesting help in the contact request flow. These values are customizable in Object Manager. The default values are:

Field Name	Details
	• Account • Billing • Case • General • Order • Other • Product
`Status`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The status of the contact request. For example: • Abandoned • Attempted • Contacted • New
`WhatId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the Salesforce record the contact request is related to, such as an account, case, opportunity, or work order.
`WhoId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the Salesforce contact record the contact request is related to, such as a contact, lead, or user.

Usage

Contact request records are created when a customer fills out an online form. This form is created using a flow that uses the type `ContactRequestFlow`. There's a guided setup experience to create this flow on the Customer Contact Requests page in Setup. You then add the flow to an Experience Cloud site using either the Flows component or the Contact Request Button & Flow component.

Contact Request works in Experience Cloud sites, whether they require authentication or not. Make sure that your users have the Run Flows permission, including your Guest User profile. Without this permission, members won't see the button or the form to submit contact requests.

By default, all Standard User and System Administrator profiles have access to the object. Make sure that your users profiles, like service agents, have at least read access on the contact request object.

You can create queues for contact requests and route them with Omni-Channel.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ContactRequestOwnerSharingRule
Sharing rules are available for the object.

ContactRequestShare
Sharing is available for the object.

SEE ALSO:

Salesforce Help: Set Up and Manage Contact Requests

ContactRequestShare

Represents a list of access levels to a ContactRequest with an explanation of the access level. This object is available in API version 45.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the User or Group has to contact requests. The possible values are: • `Read` • `Edit` • `All` (This value is not valid for `create()` or `update()` calls.) This value must be set to an access level that is higher than the organization's default access level for contact requests.

Field Name	Details
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the parent object, if any.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Possible values are: • `Manual`—The User or Group has access because a user with “All” access manually shared the ContactRequest with them. • `Owner`—The User is the owner of the ContactRequest. • `Rule`—The User or Group has access via a ContactRequest sharing rule. • `GuestRule`—The User or Group has access via a ContactRequest guest user sharing rule.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the User or Group that has been given access to the ContactRequest.

Usage

This object lets you determine which users and groups can view and edit ContactRequest records owned by other users.

If you attempt to create a new record that matches an existing record, the `create()` call updates any modified fields and returns the existing record.

SEE ALSO:

Salesforce Help: Set Up and Manage Contact Requests

ContactShare

Represents a list of access levels to a Contact along with an explanation of the access level. For example, if you have access to a record because you own it, the `ContactAccessLevel` is `All` and `RowCause` is Owner.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

As of Summer '20 and later, only users with access to the Contact object can access this object.

Fields

Field	Details
`ContactId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the Contact associated with this sharing entry. This field can't be updated.
`ContactAccessLevel`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Level of access that the User or Group has to cases associated with the account Contact. The possible values are: • `Read` • `Edit` • `All` This value is not valid for create or update. This field must be set to an access level that is higher than the organization's default access level for contacts.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter

Field	Details
	Description Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`RowCause`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can only write to this field when its value is either omitted or set to `Manual` (default). There are many possible values, including: • `Rule`—The User or Group has access via a Contact sharing rule. • `GuestRule`—The User or Group has access via a Contact guest user sharing rule. • `ImplicitChild`—The User or Group has access to the Contact via sharing access on the associated Account. • `ImplicitPerson`—The User or Group has access to the business contact of a person account via a Contact sharing rule. • `GuestPersonImplicit`—The guest user has access to the business contact of a person account via a Contact sharing rule. • `PortalImplicit`—The Contact is associated with the portal user. • `LpuImplicit`—The User has access to records owned by high-volume Experience Cloud site users via a share group. • `ARImplicit`—The User, who belongs to a partner or customer account, has access to the Contact via an account relationship data sharing rule. • `Manual`—The User or Group has access because a User with "All" access manually shared the Contact with them. • `Owner`—The User is the owner of the Contact.
`UserOrGroupId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the User or Group that has been given access to the Contact. This field can't be updated.

Usage

This object allows you to determine which users and groups can view or edit Contact records owned by other users.

SEE ALSO:

AccountShare

ContactSuggestionInsight

Represents a suggestion for a new contact record. Available in API versions 45.0 and later.

Supported Calls

`describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

To add or decline contact suggestions, users need a Sales Cloud Einstein license and edit access on accounts. As of the Spring '20 release, Pardot and High Velocity Sales users no longer have access to this object.

Fields

Field Name	Details
`AccountId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the related account.
`Address`	**Type** address **Properties** Filter, Nillable **Description** The address of the suggested contact.
`City`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The city of the suggested contact.
`ContactTitle`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The title of the suggested contact.
Country	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The country of the suggested contact.
CreatedRecordId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the created contact record.
CurrencyIsoCode	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Available only for orgs with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization.
Division	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The division of the suggested contact.
Email	**Type** email **Properties** Filter, Group, Nillable, Sort **Description** The email address of the suggested contact.
FirstName	**Type** string

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The first name of the suggested contact.
`GeocodeAccuracy`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Accuracy level of the geocode for the address. See Compound Field Considerations and Limitations for details on geolocation compound fields. Note: This field is available in the API only.
`LastName`	**Type** string **Properties** Filter, Group, Sort **Description** The last name of the suggested contact.
`LastOperationUserId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the user who last performed a related operation.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort

Field Name	Details
	Description The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (`LastReferencedDate`) but not viewed it.
`Latitude`	**Type** double **Properties** Filter, Nillable, Sort **Description** Used in conjunction with `Longitude` to specify the precise geolocation of an address.
`Longitude`	**Type** double **Properties** Filter, Nillable, Sort **Description** Used in conjunction with `Latitude` to specify the precise geolocation of an address.
`Phone`	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** The phone number of the suggested contact.
`PostalCode`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The postal code of the suggested contact.
`RationaleLabel`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The reason why this entry is a suggested contact.

Field Name	Details
`State`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The state of the suggested contact.
`Status`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The status of the suggested contact. Possible values include: • New • Pending • Added • Declined
`Street`	**Type** textarea **Properties** Filter, Group, Nillable, Sort **Description** The street of the suggested contact.

Usage

This object is read-only and isn't supported in workflows, triggers, or process builder.

ContactTag

Associates a word or short phrase with a Contact.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ItemId`	**Type** reference **Properties** Create, Filter **Description** ID of the tagged item.
`Name`	**Type** string **Properties** Create, Filter **Description** Name of the tag. If this value does not already exist, a new TagDefinition is created and becomes the parent of this Tag object. Otherwise, a TagDefinition with the same name becomes the parent of this Tag object. Parent relationships are created automatically.
`TagDefinitionId`	**Type** reference **Properties** Filter **Description** ID of the parent TagDefinition object that owns the tag.
`Type`	**Type** picklist **Properties** Create, Filter, Restricted picklist **Description** Defines the visibility of a tag. Valid values: • `Public`—The tag can be viewed and manipulated by all users in an organization. • `Personal`—The tag can be viewed or manipulated only by a user with a matching `OwnerId`.

Usage

ContactTag stores the relationship between its parent TagDefinition and the Contact being tagged. Tag objects act as metadata, allowing users to describe and organize their data.

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

ContentAsset

Represents a Salesforce file that has been converted to an asset file in a custom app in Lightning Experience. Use asset files for org setup and configuration. Asset files can be packaged and referenced by other components. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- Only admin users can edit or delete ContentAssets.
- Users with file access can create and query ContentAssets.
- It isn't necessary to create asset files for regular, collaborative use of Salesforce Files. "Assetize" files only when they're used in setup and configuration situations.
- Neither the file (ContentDocument) nor the asset settings record (ContentAssets) can be deleted if the asset file is referenced by another component.
- ContentAsset doesn't support search or most recently used (MRU) lists.
- ContentAsset doesn't support Apex triggers.

Fields

Field	Details
`ContentDocumentId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the document.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the asset file in the API. ContentAsset.DeveloperName: • must be 40 characters or fewer • must begin with a letter • can contain only underscores and alphanumeric characters

Field	Details
	• can't include spaces • can't end with an underscore • can't contain 2 consecutive underscores In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization.
IsVisibleByExternalUsers	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether unauthenticated users can see the asset file.
Language	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language for this document. This field defaults to the user's language unless the org is multi-language enabled. Specifies the language of the labels returned. The value must be a valid user locale (language and country), such as `de_DE` or `en_GB`. For more information on locales, see the `Language` field on the CategoryNodeLocalization object.
MasterLabel	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The master label for the asset file. This internal label doesn't get translated.
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation.

ContentBody

Represents the body of a file in Salesforce CRM Content or Salesforce Files. This object is available in API version 40.0 and later.

Supported Calls

`describeSObjects()`

Special Access Rules

Cannot be queried, inserted, updated, or deleted directly.

Fields

Field	Details
`Id`	**Type** ID **Properties** , Filter, Group, idLookup, Sort **Description** ID of the file body.

Usage

ContentBody is intended for internal Salesforce use. If you need to access the file content body, please use ContentVersion.

ContentDistribution

Represents information about sharing a document externally. This object is available in API version 32.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

- Content deliveries must be enabled to query content deliveries.
- Users (including users with the "View All Data" permission) can query only the files that they have access to. If the file is managed by a Content Library, the user must have "Deliver Content" enabled in the library permission definition and be a member of the library. If the file isn't managed by a Content Library, the user must have the "Enable Creation of Content Deliveries for Salesforce Files" permission.

- Users can query the `DistributionPublicUrl` and `Password` fields only if they are the file owner, if the file is shared with them, or if the `RelatedRecordId` specifies a record that the users can access.
- If the shared document is deleted, the delete cascades to any associated ContentDistribution. The ContentDistribution is still queryable by using the `QueryAll` verb.
- If the shared document is archived, the only fields that users can edit are `ExpiryDate` and `PreferencesExpires`.
- Customer Portal users can't access this object.
- Chatter Free users can't access this object.

Fields

Field Name	Details
`ContentDocumentId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the shared document.
`ContentDownloadUrl`	**Type** string **Properties** Sort, Nillable **Description** The link for downloading the file. This field is available in API version 40.0 and later.
`ContentVersionId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the shared document version.
`DistributionPublicUrl`	**Type** string **Properties** Nillable, Sort **Description** URL of the link to the shared document.
`ExpiryDate`	**Type** dateTime

Field Name	Details
	Properties Create, Filter, Nillable, Sort, Update **Description** Date when the shared document becomes inaccessible.
`FirstViewDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date when the shared document is first viewed.
`LastViewDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date when the shared document was last viewed.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Name of the content delivery.
`OwnerId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the user who owns the shared document.
`PdfDownloadUrl`	**Type** string **Properties** Sort, Nillable **Description** The link for downloading the file as a PDF. This field is available in API version 40.0 and later.

Field Name	Details
Password	**Type** string **Properties** Group, Nillable, Sort **Description** A password that allows access to a shared document.
PreferencesAllowOriginalDownload	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, the shared document can be downloaded as the file type that it was uploaded as. When `false`, download availability depends on whether a preview of the file exists. If a preview exists, the file can't be downloaded. If a preview doesn't exist, the file can still be downloaded. If the shared document is a link, it can't be downloaded.
PreferencesAllowPDFDownload	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, the shared document can be downloaded as a PDF if the original file type is PDF or if a PDF preview has been generated.
PreferencesAllowViewInBrowser	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, a preview of the shared document can be viewed in a Web browser.
PreferencesExpires	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, access to the shared document expires on the date that's specified by `ExpiryDate`.

Field Name	Details
PreferencesLinkLatestVersion	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, users see the most recent version of a shared document. When `false`, users see the version of the document that's shared, even if it isn't the most recent version.
PreferencesNotifyOnVisit	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, the owner of the shared document is emailed the first time that someone views or downloads the shared document.
PreferencesNotifyRndtnComplete	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, the owner of the shared document is emailed when renditions of the shared document that can be previewed in a Web browser are generated.
PreferencesPasswordRequired	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, a password, specified by `Password`, is required to access the shared document.
RelatedRecordId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the record, such as an Account, Campaign, or Case, that the shared document is related to.

Field Name	Details
`ViewCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of times that the shared document has been viewed.

Usage

Use this object to create, update, delete, or query information about a document shared externally via a link or via Salesforce CRM Content delivery.

The ContentDistribution object supports triggers before and after these operations: insert, update, delete. It supports triggers after undelete.

Example: The VP of Marketing wants file authors to specify whether their files can be shared with external people using content delivery. He also wants some files to have a password. You can add a custom field `DeliveryPolicy` on the ContentVersion object. Make the custom field a picklist with the values, `Allowed`, `Blocked`, and `Password required`. Add the field to the ContentVersion layout so that the user can set the delivery policy per file. Then, add an insert trigger for the ContentDistribution object to enforce the rules based on the delivery policy set in the file.

Note: The `ContentVersionId` for `ContentDistribution` must be unique.

This trigger for the ContentDistribution object enforces the delivery policy rules for each file:

```
trigger deliveryPolicy on ContentDistribution (before insert) {
    for (ContentDistribution cd : trigger.new) {
        String versionId = DeliveryPolicyHelper.getContentVersionId(cd);
        ContentVersion version = [select DeliveryPolicy__c from ContentVersion where
Id = :versionId];
        String policy = version.DeliveryPolicy__c;
        if (policy.equals('Blocked')) {
            cd.addError('This file is not allowed to be delivered.');
        } else if (policy.equals('Password required')){
            if (!DeliveryPolicyHelper.requirePassword(cd)) {
                cd.addError('To deliver this file, set a password.');
            }
        }
    }
}
```

The trigger calls this helper class:

```
public class DeliveryPolicyHelper {
    public static String getContentVersionId(ContentDistribution cd) {
        if (cd.ContentVersionId != null) {
            return cd.ContentVersionId;
        } else {
            String versionId = [select LatestPublishedVersionId from ContentDocument
where Id = :cd.ContentDocumentId].get(0).LatestPublishedVersionId;
```

```
            return versionId;
        }
    }

    public static boolean requirePassword(ContentDistribution cd) {
        return cd.PreferencesPasswordRequired;
    }
}
```

Important: Apex has a per organization limit of 10 concurrent requests that last longer than 5 seconds. A trigger that uploads files can easily hit this limit.

ContentDistributionView

Represents information about views of a shared document. This read-only object is available in API version 32.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`

Special Access Rules

- Content deliveries must be enabled to query content deliveries.
- Users (including users with the "View All Data" permission) can query only the files that they have access to. If the file is managed by a Content Library, the user must have "Deliver Content" enabled in the library permission definition and be a member of the library. If the file isn't managed by a Content Library, the user must have the "Enable Creation of Content Deliveries for Salesforce Files" permission.
- ContentDistributionView can be deleted by an admin.
- If the shared document is deleted, the delete cascades to any associated ContentDistributionView. The ContentDistributionView is still queryable by using the `QueryAll` verb.
- Customer Portal users can't access this object.
- Chatter Free users can't access this object.

Fields

Field Name	Details
`DistributionId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the content delivery that the document is part of.

Field Name	Details
`IsDownload`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** `true` if the shared document is downloaded; `false` if the shared document is viewed.
`IsInternal`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** `true` if the shared document is viewed by a user in the same organization; `false` if viewed by an external user.
`ParentViewId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of this instance of accessing the shared document.

Usage

Use this read-only object to query information about users who are accessing shared documents.

ContentDocument

Represents a document that has been uploaded to a library in Salesforce CRM Content or Salesforce Files. This object is available in versions 17.0 and later for Salesforce CRM Content. This object is available in API version 21.0 and later for Salesforce Files.

The maximum number of documents that can be published is 30,000,000. Archived files count toward this limit and toward storage usage limits.

- Contact Manager, Group, Professional, Enterprise, Unlimited, and Performance Edition customers can publish a maximum of 200,000 new versions per 24-hour period.
- Developer Edition and trial users can publish a maximum of 2,500 new versions per 24-hour period.

Supported Calls

`delete()`, `describeLayout()` `describeSObjects()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`

Special Access Rules

- By default, users (including users with the "View All Data" permission) can only query files they have access to, including:
  - Salesforce Files in their personal library and in libraries they're a member of, regardless of library permissions (API version 17.0 and later).
  - Salesforce Files they own, shared directly with them, posted on their profile, or posted on groups they can see (API version 21.0 and later).

  Enable the Query All Files permission to let your View All Data users bypass the restrictions on querying files.
  - Query All Files returns all files, including files in non-member libraries and files in unlisted groups.
  - Users can't edit, upload new versions, or delete files they don't have access to.
  - View All Data permission is required to enable Query All Files.
- Customer and Partner Portal users must have the "View Content in Portal" permission to query content in libraries where they have access.
- A Salesforce CRM Content document can be deleted if any of the following are true:
  - The document is published into a personal library or is in the user's upload queue.
  - The document is published into a public library, the user is a member of that library with the "Add Content" library privilege enabled, and the user trying to delete the document is the owner.
  - The document is published into a public library that has the "Delete Content" or "Manage Library" permission enabled, and the user trying to delete the document is not the owner.

For API version 25.0 and later, you can change ownership of Salesforce Files and Salesforce CRM Content documents.

- The following must be true to change ownership of a Salesforce CRM Content document:
  - The Salesforce CRM Content app must be enabled.
  - The user who is becoming the owner of the document must have a Salesforce CRM Content feature license.
- A user can change ownership of a Salesforce CRM Content document or Salesforce file if any of the following are true:
  - The user is the current owner, or has either the "Modify All Data" or "Manage Salesforce CRM Content" permission enabled.
  - The user has the "Manage Library" permission enabled for the library containing the document.

  Note: When the owner of a ContentDocument is changed, ContentDocumentLink may be triggered. This action deletes the ContentDocumentLink to the old owner and inserts one to the new owner.

  Note:
  - The user who is becoming the owner of the document must be a visible user who is active, but the original owner can be inactive.
  - A document's owner can be changed to a user who doesn't have access to the library that contains the document. Library administrators must give the new owner membership to the library.

Fields

Field	Details
ArchivedById	**Type** reference

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** The ID of the user who archived the document. This field is available in API version 24.0 and later.
`ArchivedDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** The date when the document was archived. This field is available in API version 24.0 and later.
`ContentAssetId`	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** If the ContentDocument is an asset file, this field points to the asset. For most entities, the value of this field is `null`. This field is available in API version 38.0 and later.
`ContentModifiedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date the document was modified. `ContentModifiedDate` updates when, for example, the document is renamed or a new document version is uploaded. When you're uploading the first version of a document, `ContentModifiedDate` can be set to the current time or anytime in the past. This field is available in API version 32.0 and later.
`ContentSize`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The size of the document in bytes.

Field	Details
	This field is available in API version 31.0 and later.
`Description`	**Type** textarea **Properties** Filter, Nillable, Sort, Update **Description** A description of the document. This field is available in API version 31.0 and later.
`Division`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** A logical segment of your organization's data. For example, if your company is organized into different business units, you could create a division for each business unit, such as "North America," "Healthcare," or "Consulting." Available only if the organization has the Division permission enabled.
`FileExtension`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** File extension of the document. This field is available in API version 31.0 and later.
`FileType`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Type of document, determined by the file extension. This field is available in API version 31.0 and later.
`IsArchived`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description Indicates whether the document has been archived (`true`) or not (`false`).
`LastReferencedDate`	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`LatestPublishedVersionId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the latest document version (ContentVersion).
`OwnerId`	**Type** reference **Properties** Filter, Group, Sort, Update **Description** ID of the owner of this document.
`ParentId`	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** ID of the library that owns the document. Created automatically when inserting a ContentVersion via the API for the first time. This field is available in API version 24.0 and later when Salesforce CRM Content is enabled.

Field	Details
PublishStatus	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Indicates if and how the document is published. Valid values are: • `P`—The document is published to a public library and is visible to other users. Label is **Public**. • `R`—The document is published to a personal library and is not visible to other users. Label is **Personal Library**. • `U`—The document is not published because publishing was interrupted. Label is **Upload Interrupted**.
SharingOption	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Controls whether sharing is frozen for a file. Only administrators and file owners with Collaborator access to the file can modify this field. Default is `Allowed`, which means that new shares are allowed. When set to `Restricted`, new shares are prevented without affecting existing shares. This field is available in API versions 35.0 and later.
SharingPrivacy	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Controls sharing privacy for a file. Only administrators and file owners with Collaborator access to the file can modify this field. Default is `Visible to Anyone With Record Access`. When set to `Private on Records`, the file is private on records but can be shared selectively with others. This field is available in API versions 41.0 and later.
Title	**Type** string **Properties** Filter, Group, idLookup, Sort, Update **Description** The title of a document.

Usage

- Use this object to retrieve, query, update, and delete the latest version of a document in a library or a Salesforce file. Use the ContentVersion object to create, query, retrieve, search, edit, and update a specific version of a Salesforce CRM Content document or Salesforce file.
- The `query()` call doesn't return archived documents. The `queryAll()` call returns archived documents.
- You can't add new versions of archived documents.
- To query a file that is accessible only through a record share, you must specify the content ID of the file. When SOQL querying the ContentVersion object, either the `ContentVersionId` or the `ContentDocumentId` must be compounded by an AND operator.

  For example,

```
SELECT FileExtension, Title FROM ContentVersion
WHERE (ContentDocumentId = '<ContentDocumentId>' or Id='<ContentVersionId>') and
IsLatest=true
```

```
SELECT Id, VersionData, FileExtension, Title FROM ContentVersion
WHERE ContentDocumentId='<ContentDocumentId>' AND FirstPublishLocationId =
'<FirstPublishLocationId>'
```

- To create a document, create version via the ContentVersion object without setting the `ContentDocumentId`. This process automatically creates a parent document record. When adding a new version of the document, you must specify an existing `ContentDocumentId` which initiates the revision process for the document. When the latest version is published, the title, owner, and publish status fields are updated in the document.
- When you delete a document, all versions of that document are deleted, including ratings, comments, and tags.
- If you query versions in the API, versions with a `PublishStatus` of `Upload Interrupted` are not returned.
- A document record is a container for multiple version records. You create a version to add a document to the system. The new version contains the actual file data which allows the document to have multiple versions. The version stores the body of the uploaded document.
- Assign topics to ContentDocument using `TopicAssignment` in API version 37.0 or later.

Associated Objects

This object has the following associated objects. Unless noted, associated objects are available in the same API version as this object.

ContentDocumentFeed (API version 20.0)
  Feed tracking is available for the object.

ContentDocumentHistory
  History is available for tracked fields of the object.

SEE ALSO:

ContentDocumentHistory

ContentVersion

ContentDocumentHistory

Represents the history of a document. This object is available in versions 17.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Special Access Rules

- Customer and Partner Portal users must have the "View Content in Portal" permission to query content in libraries where they have access.
- A user can query all versions of a document from their personal library and any version that is part of or shared with a library where they are a member, regardless of library permissions.

Fields

Field	Details
`ContentDocumentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the document.
`DataType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Data type of the field that was changed.
`Division`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** A logical segment of your organization's data. For example, if your company is organized into different business units, you could create a division for each business unit, such as "North America," "Healthcare," or "Consulting." Available only if the organization has the Division permission enabled.
`Field`	**Type** picklist **Properties** Filter, Group, Sort, Restricted picklist

Field	Details
	Description The name of the field that was changed. Possible values include: • `contentDocPublished`—The document is published into a library. • `contentDocUnpublished`—The document is archived or removed from a library, either directly or when the owning library is changed. • `contentDocRepublished`—The document is removed from the archive. • `contentDocFeatured`—The document is featured. • `contentDocSubscribed`—The document is subscribed to. • `contentDocUnsubscribed`—The document is no longer subscribed to.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The latest value of the field before it was changed.

Usage

Use this read-only object to query the history of a document.

SEE ALSO:

ContentDocument

ContentDocumentLink

Represents the link between a Salesforce CRM Content document or Salesforce file and where it's shared. A file can be shared with other users, groups, records, and Salesforce CRM Content libraries. This object is available in versions 21.0 and later for Salesforce CRM Content documents and Salesforce Files.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- In API versions 33.0 and later, you can create and delete ContentDocumentLink objects with a `LinkedEntityId` of any record type that can be tracked in the feed, even if feed tracking is disabled for that record type.
- In API versions 25.0 and later, you can create ContentDocumentLink objects with a `LinkEntityId` of type User, CollaborationGroup, or Organization.
- In API versions 21.0 and later, users with explicit Viewer access (the file has been directly shared with the user) to a file can delete ContentDocumentLink objects between the file and other users who have Viewer access. In the same API versions, any user with Viewer access to a file can delete ContentDocumentLink objects between the file and organizations or groups of which they are a member.
- For orgs with digital experiences enabled, a document can only be shared with users and groups that are a part of the Experience Cloud site the file was created in.

Fields

Field	Details
`ContentDocumentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the document.
`LinkedEntityId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the linked object. Can include Chatter users, groups, records (any that support Chatter feed tracking including custom objects), and Salesforce CRM Content libraries. Using the API only, you can relate notes to custom settings.
`ShareType`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Required. The permission granted to the user of the shared file in a library. This is determined by the permission the user already has in the library. This field is available in API version 25.0 and later. **V** Viewer permission. The user can explicitly view but not edit the shared file.

Field	Details
	C Collaborator permission. The user can explicitly view and edit the shared file. **I** Inferred permission. The user's permission is determined by the related record. For shares with a library, this is defined by the permissions the user has in that library. Inferred permission on shares with libraries and file owners is available in API versions 21.0 and later. Inferred permission on shares with standard objects is available in API versions 36.0 and later.
`Visibility`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Specifies whether this file is available to all users, internal users, or shared users. This field is available in API version 26.0 and later. `Visibility` can have the following values. • `AllUsers`—The file is available to all users who have permission to see the file. • `InternalUsers`—The file is available only to internal users who have permission to see the file. • `SharedUsers`—The file is available to all users who can see the feed to which the file is posted. SharedUsers is used only for files shared with users, and is available only when an org has private org-wide sharing on by default. The `SharedUsers` value is available in API version 32.0 and later. Note the following exceptions for `Visibility`. • `AllUsers` & `InternalUsers` values apply to files posted on standard and custom object records, but not to users, groups, or content libraries. • For posts to a record feed, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • On user and group posts, only internal users can set `Visibility` to `InternalUsers`. • For posts to a user feed, if the organization-wide default for user sharing is set to private, `Visibility` is set to `SharedUsers`. • Only internal users can update Visibility. • Visibility can be updated on links to files posted on standard and custom object records, but not to users, groups, or content libraries. • Visibility is updatable in API version 43.0 and later. The visibility setting on ContentDocumentLink determines a file's visibility on a record post. When a file has multiple references posted in a feed, the file's visibility is determined by the most visible setting.

Usage

Use this object to query the locations where a file is shared or query which files are linked to a particular location. For example, the following query returns a particular document shared with a Chatter group:

```
SELECT ContentDocument.title FROM ContentDocumentLink WHERE ContentDocumentId =
'069D00000000so2' AND LinkedEntityId = '0D5000000089123'
```

- You can't run a query without filters against ContentDocumentLink.
- You can't filter on ContentDocument fields if you're filtering by `ContentDocumentId`. You can only filter on ContentDocument fields if you're filtering by `LinkedEntityId`.
- You can't filter on the related object fields. For example, you can't filter on the properties of the account to which a file is linked. You can filter on the properties of the file, such as the title field.

A SOQL query must filter on one of `Id`, `ContentDocumentId`, or `LinkedEntityId`.

The ContentDocumentLink object supports triggers before and after these operations: insert, update, delete.

Example: This trigger for the ContentDocumentLink object prevents public XLSX files from being shared.

```
trigger NoShareXLSX on ContentDocumentLink (after insert) {
    for (ContentDocumentLink cdl : trigger.new) {
        if (!CDLHelper.isSharingAllowed(cdl)) {
            cdl.addError('Sorry, you cannot share this file.');
        }
    }
}
```

The trigger calls this helper class.

```
public class CDLHelper {

    /**
     * Gets FileExtension of the inserted content.
     */
    public static String getFileExtension(ContentDocumentLink cdl) {
        String fileExtension;
        String docId = cdl.ContentDocumentId;
       FileExtension = [select FileExtension from ContentVersion where ContentDocumentId
 = :docId].get(0).FileExtension;
        return FileExtension;
    }

    /**
     * Checks the file's PublishStatus and FileExtension to decide whether user can
share the file with others.
     * PublishStatus 'P' means the document is in a public library.
     */
    public static boolean isSharingAllowed(ContentDocumentLink cdl) {
        String docId = cdl.ContentDocumentId;
       ContentVersion version = [select PublishStatus,FileExtension from ContentVersion
 where ContentDocumentId = :docId].get(0);
        if (version.PublishStatus.equals('P') && (version.FileExtension != null &&
version.FileExtension.equals('xlsx'))) {
            return false;
        }
```

```
        return true;
    }

    /**
     * Gets the parent account name if the file is linked to an account.
     */
    public static String getAccountName(ContentDocumentLink cdl) {
        String name;
        String id = cdl.LinkedEntityId;
        if (id.substring(0,3) == '001') {
            name = [select Name from Account where Id = :id].get(0).Name;
        }
        return name;
    }
}
```

Important: Apex has a per organization limit of 10 concurrent requests that last longer than 5 seconds. A trigger that uploads files can easily hit this limit.

SEE ALSO:

ContentDocument

ContentDocumentListViewMapping

Represents an association between a ListView and a Quip ContentDocument. Applies to Quip file types only. Maintains the mapping between a list view and Quip document when the list view is exported to a newly created Quip document. This object is available in API version 44.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

To use this object, the Files Connect and Quip permissions must be enabled in the org.

To insert and update this object through the API, the QuipMassAction gater permission must also be enabled.

Fields

Field	Details
`ContentDocumentId`	**Type** reference **Properties** Create, Filter, Group, Sort

Field	Details
	Description ID of the document.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this document.
`ListViewId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the list view associated with the document.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Name of the document.

Usage

ContentDocumentListViewMapping is used primarily by the Quip list view integration feature. Only Quip file types (Quip sheets and docs) are supported. The ContentDocumentId field must point to a Quip file.

ContentDocumentSubscription

Represents a subscription for a user following or commenting on a file in a library. This object is available in API version 42.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Only users with Modify All Data permission have access to this object.

Fields

Field	Details
`ContentDocumentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the file.
`IsCommentSub`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Specifies whether the user made comments on the file.
`IsDocumentSub`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Specifies whether the user follows the file.
`UserId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user following or commenting on the file.

ContentFolder

Represents a folder in a content library for adding files. This object is available in API version 34.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

- Salesforce CRM Content or Chatter must be enabled to access ContentFolder.
- All users with a content feature license can modify folders in their personal library.
- To modify a folder, the user must be a member of the library and have permission to modify folders.

Fields

Field Name	Details
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Name of the folder.
`ParentContentFolderId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the ParentFolder.

ContentFolderItem

Represents a file (ContentDocument) or folder (ContentFolder) that resides in a ContentFolder in a ContentWorkspace. This object is available in API version 35.0 and later.

Supported Calls

`describeSObjects()`, `describeLayout()`, `query()`, `retrieve()`

Special Access Rules

Fields

Field Name	Details
ContentSize	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The file or folder size of the ContentFolderItem.
FileExtension	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Specifies the file extension if the ContentFolderItem is a file.
FileType	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Specifies the type of file if ContentFolderItem is a file.
IsFolder	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates that the ContentFolderItem is a folder, and not a file.
ParentContentFolderId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the ContentFolder that the ContentFolderItem resides in.

Field Name	Details
`Title`	**Type** string **Properties** Filter, Group, Sort **Description** The name of the file or folder.

Usage

ContentFolderLink

Defines the association between a library and its root folder. This object is available in API version 34.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

- Salesforce CRM Content must be enabled to access ContentFolderLink.
- ContentFolderLink is read-only in the context of a library.

Fields

Field Name	Details
`ContentFolderId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the folder.
`EnableFolderStatus`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Indicates the status of enabling folders for the library. Valid values are:

Field Name	Details
	• `C` — Completed folder enablement • `S` — Started folder enablement • `F` — Failed folder enablement This field is available in API version 39.0 and later.
`ParentEntityId`	**Type** reference **Properties** Filter, Group, Sort **Description** Name of the entity the folder hierarchy is linked to.

ContentFolderMember

Defines the association between a file and a folder. This object is available in API version 34.0 and later.

Supported Calls

`describeSObjects()`, `delete()`, `query()`, `retrieve()`, `update()`

Special Access Rules

- Salesforce CRM Content or Chatter must be enabled to access ContentFolderMember.
- All users with a content feature license can modify folders in their personal library.
- To modify ContentFolderMember, the user must be a member of the library and have permission to modify folders.

Fields

Field Name	Details
`ChildRecordId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the file.
`ParentContentFolderId`	**Type** reference

Field Name	Details
	Properties Filter, Group, Sort, Update **Description** ID of the folder the file is in.

ContentHubItem

Represents a file or folder in a Files Connect external data source, such as Microsoft SharePoint or OneDrive for Business. This object is available in API version 33.0 and later.

Special Access Rules

Chatter and Files Connect must be enabled for the organization.

Supported Calls

`describeSObjects()`, `query()`, `search()`

Fields

Field Name	Details
`ContentHubRepositoryId`	**Type** reference **Properties** Filter, Group, Nillable **Description** The ID for the related external data source described by the ContentHubRepository object.
`ContentModifiedDate`	**Type** dateTime **Properties** Nillable **Description** Date the file or folder content last changed.
`ContentSize`	**Type** int **Properties** Group, Nillable

Field Name	Details
	Description File or folder size.
Description	**Type** string **Properties** Filter, Group, Nillable **Description** Explanation of item in external data source.
ExternalContentUrl	**Type** url **Properties** Group, Nillable **Description** The URL of the document content in the external data source.
ExternalDocumentUrl	**Type** url **Properties** Group, Nillable **Description** The URL of the detail page in the external data source.
ExternalId	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** ID for the file or folder in the external data source.
FileExtension	**Type** string **Properties** Group, Nillable **Description** File format extension, such as .doc or .pdf
FileType	**Type** string **Properties** Group, Nillable

Field Name	Details
	Description Complete file type, such as “Microsoft Word Document.”
`IsFolder`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether item is a folder or file.
`MimeType`	**Type** string **Properties** Filter, Group, Nillable **Description** MIME type of the content.
`Name`	**Type** string **Properties** Filter, Nillable, Sort **Description** Name of the file or folder in the external data source.
`Owner`	**Type** string **Properties** Filter, Group, Nillable **Description** Username of the content owner in the external data source.
`ParentId`	**Type** string **Properties** Filter, Group, Nillable **Description** The ID of the parent folder for the record. This field isn’t returned in queries or searches of the ContentHubItem object. It supports only WHERE clauses, such as the following:

Field Name	Details
	WHERE ContentHubRepositoryId = <ID of external source> and ParentId = <ID of parent folder or record>. Or specify WHERE ParentId = <name of root folder> to return the children of the root folder. **Tip:** The ParentId field supports both Salesforce IDs (in the format "0CHxxx") and external IDs.
Title	**Type** string **Properties** Group, Nillable **Description** The title that appears in the content, which often differs from the Name of the containing file or folder.
UpdatedBy	**Type** string **Properties** Group, Nillable **Description** Username for the person who last updated the file.

Usage

The following SOQL query examples show how to retrieve files and folders from a Files Connect external data source. These examples use placeholders for ID values for the repository ID and folder IDs. Before running these queries, replace the placeholders with valid ID values for your external data source and folders.

Important: You must filter queries and searches on ContentHubItem with the ContentHubRepositoryId field; for example, SELECT Id FROM ContentHubItem WHERE ContentHubRepositoryId = <ID of external data source>.

Example 1: Get the ID and name of the root folder in an external file source.

```
SELECT Id, Name
FROM ContentHubItem
WHERE ContentHubRepositoryId = '<repository ID>' AND ParentId = NULL
```

Example 2: List all folders and files under the specified root folder.

```
SELECT Id, Name
FROM ContentHubItem
WHERE ContentHubRepositoryId = '<repository ID>' AND ParentId = '<root folder ID>'
```

Example 3: List all external file data sources by querying ContentHubRepository.

```
SELECT DeveloperName
FROM ContentHubRepository
```

Example 4: List all files and folders in a given folder and external file source.

```
SELECT Id, Name
FROM ContentHubItem
WHERE ContentHubRepositoryId = '<repository ID>' AND ParentId = '<parent folder ID>'
```

Example 5: To return only folders in the result set, add `IsFolder = true` in the `WHERE` clause to a query that returns files and folders. For example, the following query lists all folders under the root folder.

```
SELECT Id, Name
FROM ContentHubItem
WHERE ContentHubRepositoryId = '<repository ID>' AND ParentId = '<root folder ID>'
      AND IsFolder = true
```

Example 6: Retrieve a link that is used to open the specified document in an external source.

```
SELECT ExternalDocumentUrl
FROM ContentHubItem
WHERE ContentHubRepositoryId = '<repository ID>' AND Id = '<document ID>'
```

SOSL Example: Retrieve the ID and name of all documents that contain the search string. The result set is limited to the first 10 documents.

```
FIND {<search string>}
RETURNING ContentHubItem(Id, Name
                         WHERE ContentHubRepositoryId = '<repository ID>')
LIMIT 10
```

ContentHubRepository

Represents a Files Connect external data source such as Microsoft SharePoint or OneDrive for Business. This object is available in API version 33.0 and later.

Special Access Rules

Chatter and Files Connect must be enabled for the organization.

Supported Calls

`describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`DeveloperName`	**Type** string

Field Name	Details
	Properties Filter, Group, Sort **Description** The unique name of the record in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This field is automatically generated but you can supply your own value if you create the record using the API. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`MasterLabel`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Master label for the external data source. This display value is the internal label and does not get translated.
`Type`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The data source type. Possible values are: • `contenthubGoogleDrive` • `contenthubOffice365` • `contenthubOneDrive` • `contenthubSharepoint` • `contenthubBox` • `contenthubQuip`

ContentNote

Represents a note created with the enhanced note taking tool, released in Winter ‘16. This object is available in API version 32.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `search()`, `update()`

Special Access Rules

- Notes must be enabled.

Fields

Field	Details
`Content`	**Type** base64 **Properties** Create, Nillable, Update **Description** The content or body of the note, which can include properly formatted HTML or plain text. When a document is uploaded or downloaded via the API, it should be base64 encoded (for upload) or decoded (for download). Any special characters within plain text in the `Content` field must be escaped. You can escape special characters by calling `content.escapeHtml4()`. If the input contains unsafe HTML characters, we automatically strip them out before saving the content.
`ContentModifiedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date the document was modified. ContentModifiedDate updates when, for example, the document is renamed or a new document version is uploaded. This field is available in API version 48.0 and later.
`ContentSize`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Size of the note in bytes.
`CreatedById`	**Type** reference

Field	Details
	Properties Create (for users assigned the Set Audit Fields Upon Creation permission), Defaulted on createFilter, Group, Sort, Update (for users assigned the Set Audit Fields Upon Creation permission) **Description** ID of the user who created the note.
`CreatedDate`	**Type** dateTime **Properties** Create (for users assigned the Set Audit Fields Upon Creation permission), Defaulted on create, Filter, Sort, Update (for users assigned the Set Audit Fields Upon Creation permission) **Description** Date the note was created.
`FileExtension`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** File extension of the note.
`FileType`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Type of file for the note. All notes have a file type of `SNOTE`.
`Id`	**Type** id **Properties** Defaulted on createFilter, Group, Nillable, Sort **Description** ID of the note.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the note has been deleted.

Field	Details
IsReadOnly	**Type** boolean **Properties** Defaulted on create, Group, Sort **Description** Indicates whether the note is read only.
LastModifiedById	**Type** reference **Properties** Defaulted on create, Filter, Group, Sort, Update (for users assigned the Set Audit Fields Upon Creation permission) **Description** The ID of the user who last modified the note.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable Sort **Description** Date the note was last viewed. This field is available in API version 35.0 and later.
LatestPublishedVersionId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the ContentVersion for the latest published version of the note.
OwnerId	**Type** reference **Properties** Create (for users assigned the Set Audit Fields Upon Creation permission), Defaulted on create, Filter, Group, Sort, Update (for users assigned the Set Audit Fields Upon Creation permission) **Description** ID of the owner of the note.
SharingPrivacy	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update

Field	Details
	Description Controls sharing privacy for a file. Only administrators and file owners with Collaborator access to the file can modify this field. Default is `Visible to Anyone With Record Access`. When set to `Private on Records`, the file is private on records but can be shared selectively with others. This field is available in API versions 41.0 and later.
`TextPreview`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A preview of the note's content. This field is available in API version 35.0 and later.
`Title`	**Type** string **Properties** Create, Filter, Group, idLookup, Namefield, Sort, Update **Description** Title of the note.

Usage

- Use ContentNote to create, query, retrieve, search, edit, and update notes.
- ContentNote is built on ContentVersion, and so it has many of the same usages.
- Not all fields can be set for notes. Only the `Content` and `Title` fields can be updated.
- The maximum file size you can upload via the SOAP API is 50 MB. When a document is uploaded or downloaded via the API, it is converted to base64. This conversion increases the document size by approximately 37%. Account for the base64 conversion increase so that the file you plan to upload is less than 50 MB after conversion.
- You can convert old Note records to Lightning Experience, so users can view and edit notes from the Notes & Attachments related list in Lightning Experience. Users can edit their converted notes, which are accessible from the Notes related list and Notes tab. Copy old Note records to newly created ContentNote records. Users assigned the Set Audit Fields Upon Creation permission can set the owner, created date, and last modified date on ContentNote records.
- SOQL and SOSL queries on the ContentNote return only the most recent version of the note.
- To relate a note to a record, use `ContentDocumentLink`.

For example, the following Apex code creates a note and escapes any special characters so they are converted to their HTML equivalents.

Note: Apex code doesn't need to be encoded to base64 before it is uploaded and downloaded.

```
ContentNote cn = new ContentNote();
cn.Title = 'test1';
String body = 'Hello World. Before insert/update, escape special characters such as ", ',
```

```
 &, and other standard escape characters.';
cn.Content = Blob.valueOf(body.escapeHTML4());
insert(cn);
```

In this example, the following code creates a note using text that is already formatted as HTML, so it does not need to be escaped.

```
ContentNote cn = new ContentNote();
cn.Title = 'test2';
String body = '<b>Hello World. Because this text is already formatted as HTML, it does not
 need to be escaped.
Special characters such as &quot;, etc. must already use their HTML equivalents.</b>';
cn.Content = body;
insert(cn);
```

ContentNotification

Represents a notification for a file. This object is available in API version 42.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Only users with Modify All Data permission have access to this object.

Fields

Field	Details
`EntityIdentifierId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the object with the notification.
`EntityType`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Type of object with the notification. One of the following. • `ContentDocument` • `ContentTagName`

Field	Details
	• `ContentVersion` • `ContentWorkspace` • `ContentWorkspacePermission` • `User`
`Nature`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Type of notification.
`Subject`	**Type** textarea **Properties** Filter, Nillable, Sort **Description** Subject of the notification.
`Text`	**Type** textarea **Properties** Filter, Nillable, Sort **Description** Text of the notification.
`UsersId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user who received the notification.

ContentTagSubscription

Represents a subscription for a user following a tag on a file. This object is available in API version 42.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Only users with Modify All Data permission have access to this object.

Fields

Field	Details
`UserId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the user following the tag on the file.

ContentUserSubscription

Represents a subscription for a user following another user. This object is available in API version 42.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Only users with Modify All Data permission have access to this object.

Fields

Field	Details
`SubscribedToUserId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user who is followed by another user.
`SubscriberUserId`	**Type** reference **Properties** Filter, Group, Sort

Field	Details
	Description ID of the user who follows another user.

ContentVersion

Represents a specific version of a document in Salesforce CRM Content or Salesforce Files. This object is available in versions 17.0 and later for Salesforce CRM Content documents. This object is available in versions 20.0 and later for Salesforce Files.

The maximum number of versions that can be published in a 24-hour period is 200,000.

Note: Depending on how files are shared, queries on ContentDocument and ContentVersion without specifying an ID won't return all files a user has access to. For example, if a user only has access to a file because they have access to a record that the file is shared with, the file won't be returned in a query such as "SELECT Id FROM ContentDocument."

Supported Calls

`create()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

- All users with a content feature license can create versions in their personal library. Customer and Partner Portal users must also supply the `NetworkId` of the Experience Cloud site in the request.
- By default, users (including users with the “View All Data” permission) can only query files they have access to, including:
  - Salesforce Files in their personal library and in libraries they're a member of, regardless of library permissions (API version 17.0 and later).
  - Salesforce Files they own, shared directly with them, posted on their profile, or posted on groups they can see (API version 21.0 and later).

  Enable the Query All Files permission to let your View All Data users bypass the restrictions on querying files.
  - Query All Files returns all files, including files in non-member libraries and files in unlisted groups.
  - Users can’t edit, upload new versions, or delete files they don’t have access to.
  - View All Data permission is required to enable Query All Files.
- All users can update versions in their personal library.
- The owner of a version or document can update the document if they are a member of the library, regardless of library permissions.
- To update a Salesforce CRM Content document, the user must be a member of the library with one of these library privileges enabled:
  - Add Content
  - Add Content On Behalf of Others
  - Manage Library
- Customer and Partner Portal users must have the View Content in Portal permission to query content in libraries where they have access.
- Customer and Partner Portal users can only publish, version, or edit documents if they have a Salesforce CRM Content feature license.
- `FileType` is defined by either `ContentUrl` for links or `PathOnClient` for documents, but not both.

- In API version 34.0 and later, any file can be shared with libraries, whether the file originated in Chatter or in Salesforce CRM Content.
- In API version 39.0 and later, custom Apex download handlers can be created that can control access to documents. See the *Apex Developer Guide* for more information.

Fields

Field	Details
`Checksum`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** MD5 checksum for the file.
`ContentBodyId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** Allows inserting a file version independently of the file blob being uploaded. This field is available for query and insert only. It can only point to a ContentBody record. This field is available in API version 40.0 and later.
`ContentDocumentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the document.
`ContentLocation`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Origin of the document. Valid values are: • **S**—Document is located within Salesforce. Label is **Salesforce**. • **E**—Document is located outside of Salesforce. Label is **External**. • **L**—Document is located on a social network and accessed via Social Customer Service. Label is **Social Customer Service**.

Field	Details
ContentModifiedById	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the user who modified the document.
ContentModifiedDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort **Description** Date the document was modified. ContentModifiedDate updates when, for example, the document is renamed or a new document version is uploaded. When uploading the first version of a document, ContentModifiedDate can be set to the current time or any time in the past.
ContentSize	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Size of the document in bytes. Always zero for links.
ContentUrl	**Type** url **Properties** Create, Filter, Nillable, Sort, Update **Description** URL for links. This is only set for links. One of the fields that determines the FileType. The character limit in API versions 33.0 and later is 1,300. The character limit in API versions 32.0 and earlier was 255.
Description	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the content version.

Field	Details
`Division`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** A logical segment of your organization's data. For example, if your company is organized into different business units, you could create a division for each business unit, such as "North America," "Healthcare," or "Consulting." Available only if the org has the Division permission enabled.
`ExternalDataSourceId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the external document referenced in the `ExternalDataSource` object.
`ExternalDocumentInfo1`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Stores the URL of the file in the external content repository. The integration from the external source determines the content for this string. After the reference or copy is created, the URL of the external file is updated when you: • Republish a file reference in Lightning Experience • Open the document • Create a file reference in the Connect REST API with `reuseReference` set to true. When the file is updated, the shared link is updated to the most current version.
`ExternalDocumentInfo2`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Contains the external file ID. Salesforce determines the content for this string, which is private. The content can change without notice, depending on the external system. After the file reference is created, this field isn't updated, even if the file path changes.
`FeaturedContentBoost`	**Type** int

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** Read only. Designates a document as featured.
`FeaturedContentDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Date the document was featured.
`FileExtension`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** File extension of the document. This field is available in API version 31.0 and later.
`FileType`	**Type** string **Properties** Filter, Group, Sort **Description** Type of content determined by `ContentUrl` for links or `PathOnClient` for documents.
`FirstPublishLocationId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the location where the version was first published. If the version is first published into a user's personal library or My Files, the field will contain the ID of the user who owns the personal library or My Files. In Lightning Experience, if the first version is published into a public library, the field will contain the ID of that library. Accepts all record IDs supported by ContentDocumentLink (anything a file can be attached to, like records and groups). Setting `FirstPublishLocationId` allows you to create a file and share it with an initial record/group in a single transaction, and have the option to create more links to share

Field	Details
	the file with other records or groups later. When a file is created, it's automatically linked to the record, and PublishStatus will change to Public from Pending/Personal. This field is only set the first time a version is published via the API. `FirstPublishLocationId` can't be set to another ID when a new content version is inserted. **Note:** Salesforce updates the `FirstPublishLocationId` updates automatically when a new `OwnerId` is added to the `ContentVersion`. For example, when you publish a new version with a different `OwnerId` than the current `OwnerId`, the `FirstPublishLocationId` of all previous versions updates to the previous `OwnerId`. The new published version sets the `FirstPublishLocationId` to the new `OwnerId`.
`IsAssetEnabled`	**Type** boolean **Properties** Create, Group, Defaulted on create **Description** Can be specified on insert of ContentVersion to automatically convert a ContentDocument file into a ContentAsset. This field can be SOQL queried, but it can't be edited. This field is available in API version 38.0 and later.
`IsEncrypted`	**Note:** This information is about Shield Platform Encryption and not Classic Encryption. **Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether files are encrypted using Shield Platform Encryption (`true`) or not (`false`). This field is available in API version 34.0 and later.
`IsLatest`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this is the latest version of the document (`true`) or not (`false`).
`IsMajorVersion`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort

Field	Details
	Description `true` if the document is a major version; `false` if the document is a minor version. Major versions can't be replaced.
`Language`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language for this document. This field defaults to the user's language unless the organization is multi-language enabled. Specifies the language of the labels returned. The value must be a valid user locale (language and country), such as `de_DE` or `en_GB`. For more information on locales, see the `Language` field on the CategoryNodeLocalization object.
`NegativeRatingCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Read only. The number of times different users have given the document a thumbs down. Rating counts for the latest version are not version-specific. If Version 1 receives 10 thumbs-down votes, and Version 2 receives 2 thumbs-down votes, the `NegativeRatingCount` on Version 2 is 12. However, rating counts are not retroactive for prior versions. The `NegativeRatingCount` on Version 1 is 10.
`NetworkId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the Experience Cloud site that this file originated from. This field is available in API version 26.0 and later, if digital experiences is enabled for your org. You can add a `NetworkId` only when creating a file. You can't change or add a `NetworkId` for an existing file.
`Origin`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The source of the content version. Valid values are:

Field	Details
	• **C**—Content document from the user's personal library. Label is **Content**. The `FirstPublishLocationId` must be the user's ID. If `FirstPublishLocationId` is left blank, it defaults to the user's ID. • **H**—Salesforce file from the user's My Files. Label is **Chatter**. The `FirstPublishLocationId` must be the user's ID. If `FirstPublishLocationId` is left blank, it defaults to the user's ID. Origin can only be set to **H** if Chatter is enabled for your organization. This field defaults to C. Label is **Content Origin**.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner of this document.
`PathOnClient`	**Type** string **Properties** Create, Filter, Nillable, Sort **Description** The complete path of the document. One of the fields that determines the `FileType`. Note: Specify a complete path including the path extension in order for the document to be visible in the Preview tab.
`PositiveRatingCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Read only. The number of times different users have given the document a thumbs up. Rating counts for the latest version are not version-specific. If Version 1 receives 10 thumbs-up votes, and Version 2 receives 2 thumbs-up votes, the `PositiveRatingCount` on Version 2 is 12. However, rating counts are not retroactive for prior versions. The `PositiveRatingCount` on Version 1 is 10.
`PublishStatus`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Indicates if and how the document is published. Valid values are:

Field	Details
	• `P`—The document is published to a public library and is visible to other users. Label is **Public**. • `R`—The document is published to a personal library and is not visible to other users. Label is **Personal Library**. • `U`—The document is not published because publishing was interrupted. Label is **Upload Interrupted**.
`RatingCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Read only. Total number of positive and negative ratings.
`ReasonForChange`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** The reason why the document was changed. This field can only be set when inserting a new version (revising) a document.
`RecordTypeId`	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the record type of the version. Custom fields are restricted in `RecordTypeId`. When an administrator creates a custom field via the API it must be added to at least one page layout: • If the custom field is added to the page layout associated with the General record type, the `RecordTypeId` that corresponds to that record type does not have to be set on the version record. • If the custom field is added to the page layout associated with a custom record type, the `RecordTypeId` that corresponds to that record type must be set on the version record.
`SharingOption`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update

Field	Details
	Description Controls whether sharing is frozen for a file. Only administrators and file owners with Collaborator access to the file can modify this field. Default is `Allowed`, which means that new shares are allowed. When set to `Restricted`, new shares are prevented without affecting existing shares. This field is available in API versions 35.0 and later.
`SharingPrivacy`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Controls sharing privacy for a file. Only administrators and file owners with Collaborator access to the file can modify this field. Default is `Visible to Anyone With Record Access`. When set to `Private on Records`, the file is private on records but can be shared selectively with others. This field is available in API versions 41.0 and later.
`TagCsv`	**Type** textarea **Properties** Create, Nillable, Sort, Update **Description** Text used to apply tags to a content version via the API.
`TextPreview`	**Type** string **Properties** Nillable, Filter,Group, Sort **Description** A preview of a document. Available in API version 35.0 and later.
`Title`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The title of a document.
`VersionData`	**Type** base64

Field	Details
	Properties Create, Nillable, Update **Description** The content or body of the note, which can include properly formatted HTML or plain text. When a document is uploaded or downloaded via the API, it should be base64 encoded (for upload) or decoded (for download). Any special characters within plain text in the `Content` field must be escaped. You can escape special characters by calling `content.escapeHtml4()`. This field can't be set for links. The maximum file size you can upload via the SOAP API is 50 MB. When a document is uploaded or downloaded via the API, it is converted to base64 and stored in `VersionData`. This conversion increases the document size by approximately 37%. Account for the base64 conversion increase so that the file you plan to upload is less than 50 MB after conversion. If a custom Apex download handler is active, this field is accessed from the API, and the download is not allowed, Salesforce will return a `CONTENT_CUSTOMIZED_DOWNLOAD_EXCEPTION` error.
`VersionNumber`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The version number. The number increments with each version of the document, for example, 1, 2, 3.

Usage

- Use this object to create, query, retrieve, search, edit, and update a specific version of a Salesforce CRM Content document or Salesforce file. Use the ContentDocument object to retrieve, query, update, and delete the latest version of a document, but not a content pack, in a library or a Salesforce file.
- Use this object to create, query, retrieve, search, edit, and update a specific version of a Salesforce file. Use the ContentDocument object to retrieve, query, update, and delete the latest version of a Salesforce file.
- To query a file that is shared only with a record, you must specify the content ID of the file.
- Not all fields can be set for Salesforce Files.
- You can only update a version if it is the latest version and if it is published.
- You can't archive versions.
- Using API version 32.0 and later, you can update record types on versions.
- You can't delete a version via the API.
- The maximum file size you can upload via the SOAP API is 50 MB. When a document is uploaded or downloaded via the API, it is converted to base64 and stored in `VersionData`. This conversion increases the document size by approximately 37%. Account for the base64 conversion increase so that the file you plan to upload is less than 50 MB after conversion.

- To download a document via the API, you must export the `VersionData` of the document. This does not increase the download count.
- When you upload a document from your local drive using the Data Loader, you must specify the actual path in both `VersionData` and `PathOnClient`. `VersionData` identifies the location and extracts the format and `PathOnClient` identifies the type of document being uploaded.
- SOQL queries on the ContentVersion object return all versions of the document. SOSL searches on the ContentVersion object return only the most recent version of the document.
- If you query versions in the API, versions with a `PublishStatus` of `Upload Interrupted` are not returned.
- Documents published into a personal library assume the default record type that is set for the user profile of the person publishing the document (General, if no default is set for the user profile).

  Note: An administrator can rename the default (*Content Version Layout*) page layout.

- Contact Manager, Group, Professional, Enterprise, Unlimited, and Performance Edition customers can publish a maximum of 200,000 new versions per 24–hour period. Developer Edition and trial users can publish a maximum of 2,500 new versions per 24–hour period.
- Custom validation rules can prevent an update of documents published into a personal library via the API.

Applying Tags to ContentVersion Records

Tags can be applied to ContentVersion records using either Enterprise or Partner API.

To apply tags to a ContentVersion record, set a value in the `TagCsv` field. For example, setting this field to `one,two,three` creates and associates three tags to that version.

- The maximum length of the `TagCsv` field is 2,000 characters.
- The maximum length of an individual tag is 100 characters.
- When tags are applied to a version, the content is indexed automatically and the tags are searchable.
- You can't apply tags to a `TagCsv` that is published into a personal library.
- You can't apply tags using the ContentDocument object.
- You can't change or delete tag names. You can remove tags from a document, but that doesn't delete the tag.
- Tags are case insensitive. You can't have two tags with the same name even if they use different uppercase and lowercase letters. The case of the original tag is always used.

To delete tags from a ContentVersion record, perform a standard API update, and remove any values from the `TagCsv` field that you want to delete. For example, if the original `TagCsv` is `one,two,three`, perform an API update specifying `one,three` in the `TagCsv` field to delete `two`. To delete all tags from a ContentVersion you perform a standard API update by setting the field to `null`.

If you create a ContentVersion record and want to revise it via the API, you insert another ContentVersion record but associate it to the same ContentDocument record as the original. This has an impact on tagging:

- If you insert the revision and do not set any value in the `TagCsv` field, any tags applied to the previous version are automatically applied to the new version.
- If you insert the revision and specify a new `TagCsv` field, no tags transfer over and the tags you specify are applied instead.

When you perform a SOQL query for a ContentVersion record and select the `TagCsv` field, all the tags associated with that record are returned. The tags in the string are always ordered alphabetically even if they were inserted in a different order. You can't use the `TagCsv` field as part of a filter in a SOQL query. You can't query all tags in your organization.

Library tagging rules:

- API tagging respects the tagging restrictions that exist on any library that the document is published into. For example, if the library is in restricted tagging mode and only allows tags `one,three`, you can't save a version with a `TagCsv` of `one,two,three`.
- If the library is in guided tagging mode, you can apply tags to the ContentVersion. You can't query the value of guided tags on a library, but you can query the tagging model of a library.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ContentVersionHistory
History is available for tracked fields of the object.

SEE ALSO:

ContentDocument
ContentVersionHistory

ContentVersionComment

Represents a comment on a version of a file. This object is available in API version 42.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Only users with Modify All Data permission have access to this object.

Fields

Field	Details
`ContentDocumentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the file.
`ContentVersionId`	**Type** reference **Properties** Filter, Group, Sort

Field	Details
	Description ID of the version of the file.
UserComment	**Type** textarea **Properties** Filter, Nillable, Sort **Description** ID of the user who commented on the file.

ContentVersionHistory

Represents the history of a specific version of a document. This object is available in version 17.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Special Access Rules

- Customer and Partner Portal users must have the "View Content in Portal" permission to query content in libraries where they have access.
- A user can query all versions of a document from their personal library and any version that is part of or shared with a library where they are a member, regardless of library permissions.

Note: To record an event in `contentVersionViewed`, make sure:

- All files are published to a Content Library.
- The details page is viewed in Salesforce Classic.

Fields

Field	Details
ContentVersionId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the version.

Field	Details
`DataType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Data type of the field that was changed.
`Division`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** A logical segment of your organization's data. For example, if your company is organized into different business units, you could create a division for each business unit, such as “North America,” “Healthcare,” or “Consulting.” Available only if the organization has the Division permission enabled.
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed. Possible values include: • `contentVersionCreated`—A new version is created. • `contentVersionUpdated`—The title, description, or any custom field on the version is changed. • `contentVersionDownloaded`—A version is downloaded. • `contentVersionViewed`—The version details are viewed. • `contentVersionRated`—The version is rated. • `contentVersionCommented`—The version receives a comment. • `contentVersionDataReplaced`—The new version replaces the previous version, which can happen only when the new version is uploaded immediately after the previous version.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.

Field	Details
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The latest value of the field before it was changed.

Usage

Use this read-only object to query the history of a document version.

SEE ALSO:

ContentVersion

ContentVersionRating

Represents a rating on a version of a file. This object is available in API version 42.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Only users with Modify All Data permission have access to this object.

Fields

Field	Details
`ContentVersionId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the version of the file.
`Rating`	**Type** int

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** Rating of the file.
`UserComment`	**Type** textarea **Properties** Filter, Nillable, Sort **Description** Comment made by the user who rated the file.
`UserId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user who rated the file.

ContentWorkspace

Represents a content library. This object is available in versions 17.0 and later.

Note: This object doesn't apply to personal libraries.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Note: create( ), update( ) and delete( ) on ContentWorkspace are supported in API version 40.0 and later only.

Special Access Rules

- The Access Libraries user permission allows orgs to make libraries available to users without requiring that they have the legacy Salesforce CRM Content license. This permission is available for profiles and permission sets on most standard user licenses, and isn't available for High Volume Customer Portal, Customer Community, or Chatter Free licenses. Available in API versions 40.0 and later.
- Users with the Create Libraries user perm or the Manage Salesforce CRM Content administrator permission can create libraries (ContentWorkspaces) from the Libraries tab in Salesforce Classic and from the API.
- Customer and Partner Portal users can only edit the library document object if they have a Salesforce CRM Content feature license.
- Customer and Partner Portal users can query this object if they have the "View Content in Portal" permission. A user can query all public libraries where they're members, regardless of library permissions.

- Automated process users can't publish documents to libraries (ContentWorkspaces).

Fields

Field	Details
`DefaultRecordTypeId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the default content type for the library. Content types are the containers for custom fields in Salesforce CRM Content.
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Text description of the content library.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The unique name of the library in the API. Allows a link to the library to be packaged when an asset file is added to a package. Although libraries aren't a packageable entity, references to libraries with a developer name will be included in the package when asset files are packaged. These links can then be restored in the target org. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. Label is Unique Name. This field is available in API version 39.0 and later.
`IsRestrictContentTypes`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Read only. Indicates whether content types have been restricted (`true`) or not (`false`).

Field	Details
IsRestrictLinkedContentTypes	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Read only. Indicates whether linked content types have been restricted (`true`) or not (`false`).
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Name of the library.
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The unique name of the library in the API. Allows a link to the library to be packaged when an asset file is added to a package. Limit: 15 characters. This field is available in API version 39.0 and later.
RootContentFolderId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of root folder of the library. This field is available in API version 39.0 and later.
ShouldAddCreatorMembership	**Type** boolean **Properties** Create, Defaulted on create, Group **Description** Automatically create a library membership for the user creating the library. Note this field isn't meant for query and always returns false in query. This field is available in API version 40.0 and later.
TagModel	**Type** picklist

Field	Details
	Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of tagging assigned to a library. Valid values are: • `U` — Unrestricted. No restrictions on tagging. Users can enter any tag when publishing or editing content. • `G` — Guided. Users can enter any tag when publishing or editing content, but they're also offered a list of suggested tags. • `R` — Restricted. Users must choose from a list of suggested tags.
`WorkspaceImageId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of a library image. Image files can be assigned to libraries for branding and easy identification. Library image is visible to all users, even if they aren't library members. This field is available in API version 43.0 and later.
`WorkspaceType`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Differentiates between different types of libraries. Valid values are: • `R` — Regular library • `B` — Org asset library This field is available in API version 39.0 and later.

Usage

Use this object to query libraries to find out where documents can be published.

If the content type isn't specified when publishing a new version into a library, it is determined by the `DefaultRecordTypeId` of the primary library.

As of 40.0, you can create, update, or delete a library via the API.

SEE ALSO:

ContentWorkspaceDoc

ContentWorkspaceDoc

Represents a link between a document and a public library in Salesforce CRM Content. This object is available in versions 17.0 and later.

Note: This object does not apply to documents and versions in a personal library.

Supported Calls

`create()`, `delete()`, `describeSObjects()` `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- Customer and Partner Portal users must have the "View Content in Portal" permission in order to query and obtain content in libraries where they have access.
- Customer and Partner Portal users can only edit documents if they have a Salesforce CRM Content feature license.
- To create a ContentWorkspaceDoc, you must be a member of the library with one of these library privileges enabled:
  - "Add Content"
  - "Add Content On Behalf of Others"
  - "Manage Library"
- To query all library documents in a library, a user must be a member of that library, regardless of library permissions.

Fields

Field	Details
`ContentDocumentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Read only. ID of the library document.
`ContentWorkspaceId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Read only. ID of the library.
`IsOwner`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field	Details
	Description Read only. Indicates whether the library owns the document and determines permissions for that document (`true`) or not (`false`). Documents can belong to more than one library, but only one library owns the document and determines its permissions.

Usage

- Use this object to link a document to one or more libraries.
- To share a document with additional libraries, create additional ContentWorkspaceDoc records which join the document to the additional libraries.
- Inserting a ContentWorkspaceDoc triggers the publish process for public libraries.
- A document can be published into many public libraries, but it will always be owned by one library which controls the security of the document.
- A document can only be published into the document owner's personal library. You can't publish into another user's personal library. Personal libraries are not visible via the API.
- To publish a document into a personal library, you must specify your user ID as the first publish location ID. If you leave the first publish location ID blank, it defaults to the current user's ID.
- A document can be published from a personal library into a public library, but once it has been published into the public library, it can't be published into the personal library again.
- You can't publish a document from a personal library into a public library that has restricted content types.
- You can't update or delete a library document via the API.

SEE ALSO:

ContentWorkspace

ContentWorkspaceMember

Represents a member of a content library. This object is available in API version 40.0 and later.

Manage library membership from the API.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

A user can create/update/delete memberships if they have the Manage Salesforce CRM Content admin perm or the Manage Library permission for the library concerned.

Fields

Field	Details
ContentWorkspaceId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the library.
ContentWorkspacePermissionId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The id of the library permission or role.
MemberId	**Type** reference **Properties** Create, Filter, Group,Namepointing, Sort **Description** ID of the library member (the member is either a user or a group).
MemberType	**Type** picklist **Properties** Filter, Group, Nillable,Restricted picklist, Sort **Description** The type of library member. Valid values are: • G - Group • U - User

Usage

Use this object to create, update, or delete members from a library.

ContentWorkspacePermission

Represents a library permission. This object is available in API version 40.0 and later.

A library permission is a group of privileges assigned to each content library member. It determines which tasks a member can perform in a particular library. The same user can have a different library permission in each of his or her libraries.

Note: Library permissions do not apply to personal libraries. All library users can save files in their personal libraries.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`,`update()`, `upsert()`

Special Access Rules

The ability to create permissions requires either the Manage Salesforce CRM Content admin perm or the Manage Content Permissions user perm.

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description**
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Namefield, Sort, Update **Description** Name of the library.
`PermissionsAddComment`	**Type** boolean **Properties** Create, Filter, Update **Description** Permission for user to post comments to any content in the library and view all comments in the library. Users can edit or delete their own comments.
`PermissionsAddContent`	**Type** boolean **Properties** Create, Filter, Update

Field	Details
	Description Permission for user to publish new content to the library, upload new content versions, or restore archived (deleted) content. Content authors can also change any tags associated with their content and archive or delete their own content.
PermissionsAddContentOBO	**Type** boolean **Properties** Create, Filter, Update **Description** Permission for user to choose an author when publishing content in the library.
PermissionsArchiveContent	**Type** boolean **Properties** Create, Filter, Update **Description** Permission for user to archive and restore any content in the library.
PermissionsChatterSharing	**Type** boolean **Properties** Create, Filter, Update **Description** Permission for user to make content from this library accessible outside of the library, sharing with a record or in Chatter. From a record or from Chatter, select a file from the library and attach it to a record or a post.
PermissionsDeleteContent	**Type** boolean **Properties** Create, Filter, Update **Description** Permission for user to delete any content in the library. Authors can undelete their own content from the Recycle Bin.
PermissionsDeliverContent	**Type** boolean **Properties** Create, Filter, Update **Description** Permission for user to share content outside the org via a content delivery or public link.

Field	Details
PermissionsFeatureContent	**Type** boolean **Properties** Create, Filter, Update **Description** Permission for user to identify any content in the library as “featured.”
PermissionsManageWorkspace	**Type** boolean **Properties** Create, Filter, Update **Description** Permission for user to perform any action in the library. This privilege is required to edit a library’s name and description, add or remove library members, or delete a library. Manage Library is a super permission which provides all other permission options listed except Deliver Content. Creating a library requires the Manage Salesforce CRM Content app permission or Create Libraries system permission.
PermissionsModifyComments	**Type** boolean **Properties** Create, Filter, Update **Description** Permission for user to edit or delete comments made to any content in the library.
PermissionsOrganizeFileAndFolder	**Type** boolean **Properties** Create, Filter, Update **Description** Permission for user to create, rename, and delete folders in libraries.
PermissionsTagContent	**Type** boolean **Properties** Create, Filter, Update **Description** Permission for user to add tags when publishing content or editing content details in the library.
PermissionsViewComments	**Type** boolean

Field	Details
	Properties Create, Filter, Update **Description** Permission for user to view comments.
`Type`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Provides the type of access a user has to a library. Valid values are: • Library Administrator • Author • Viewer • Custom

ContentWorkspaceSubscription

Represents a subscription for a user following a library. This object is available in API version 42.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Only users with Modify All Data permission have access to this object.

Fields

Field	Details
`ContentWorkspaceId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the library.

Field	Details
UserId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user following the library.

Contract

Represents a contract (a business agreement) associated with an Account.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
AccountId	**Type** reference **Properties** Create, Filter, Group, Sort,Update **Description** Required. ID of the Account associated with this contract.
ActivatedById	**Type** reference **Properties** Filter, Group, Nillable, Sort,Update **Description** ID of the User who activated this contract.
ActivatedDate	**Type** dateTime **Properties** Filter, Nillable, Sort, Update **Description** Date and time when this contract was activated.

Field	Details
BillingAddress	**Type** address **Properties** Filter, Nillable **Description** The compound form of the billing address. Read-only. See Address Compound Fields for details on compound address fields.
BillingCity	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Details for the billing address. Maximum size is 40 characters.
BillingCountry	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Details for the billing address of this account. Maximum size is 80 characters.
BillingCountryCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO country code for the contract's billing address.
BillingGeocodeAccuracy	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The accuracy of the geocode for the billing address. Possible values are: • Address • Block • City • County • ExtendedZip

Field	Details
	• `NearAddress` • `Neighborhood` • `State` • `Street` • `Unknown` • `Zip`
`BillingLatitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `BillingLongitude` to specify the precise geolocation of a billing address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
`BillingLongitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `BillingLatitude` to specify the precise geolocation of a billing address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places.
`BillingPostalCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Details for the billing address of this account. Maximum size is 20 characters.
`BillingState`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Details for the billing address. Maximum size is 80 characters.
`BillingStateCode`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description The ISO state code for the contract's billing address.
BillingStreet	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Street address for the billing address.
CompanySignedDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Date on which the contract was signed by your organization.
CompanySignedId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the User who signed the contract.
ContractNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** Number of the contract.
ContractTerm	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Number of months that the contract is valid.
CustomerSignedDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description Date on which the customer signed the contract.
`CustomerSignedId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the Contact who signed this contract.
`CustomerSignedTitle`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Title of the customer who signed the contract.
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of the contract.
`EndDate`	**Type** date **Properties** Filter, Group, Nillable, Sort, **Description** Read-only. Calculated end date of the contract. This value is calculated by adding the `ContractTerm` to the `StartDate`.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`LastActivityDate`	**Type** date

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** Value is one of the following, whichever is the most recent: • Due date of the most recent event logged against the record. • Due date of the most recently closed task associated with the record.
`LastApprovedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Last date the contract was approved.
`LastReferencedDate`	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
`LastViewedDate`	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (`LastReferencedDate`) but not viewed it.
`OwnerExpirationNotice`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Number of days ahead of the contract end date (15, 30, 45, 60, 90, and 120). Used to notify the owner in advance that the contract is ending.
`OwnerId`	**Type** reference

Field	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the user who owns the contract.
`Pricebook2Id`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the pricebook, if any, associated with this contract.
`RecordTypeId`	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the record type assigned to this object.
`ShippingAddress`	**Type** address **Properties** Filter, Nillable **Description** The compound form of the shipping address. Read-only. See Address Compound Fields for details on compound address fields.
`ShippingCity`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Details of the shipping address. City maximum size is 40 characters.
`ShippingCountry`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Details of the shipping address. Country maximum size is 80 characters.

Field	Details
ShippingCountryCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO country code for the contract's shipping address.
ShippingLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `ShippingLongitude` to specify the precise geolocation of a shipping address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
ShippingLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `ShippingLatitude` to specify the precise geolocation of an address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places.
ShippingPostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Details of the shipping address. Postal code maximum size is 20 characters.
ShippingState	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Details of the shipping address. State maximum size is 80 characters.
ShippingStateCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description The ISO state code for the contract's shipping address.
ShippingStreet	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street address of the shipping address. Maximum of 255 characters.
SpecialTerms	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Special terms that apply to the contract.
StartDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort,Update **Description** Start date for this contract. Label is **Contract Start Date**.
Status	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** The picklist of values that indicate order status. Each value is within one of two status categories defined in `StatusCode`. For example, the status picklist may contain: Ready to Ship, Shipped, Received as values within the Activated `StatusCode`.
StatusCode	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The status category for the contract. A contract can be Draft, InApproval, or Activated. Label is **Status Category**.

Usage

The Contract object represents a business agreement.

The `Status` field specifies the current state of a contract. Status strings (defined in the ContractStatus object) represent its current state (Draft, InApproval, or Activated).

Client applications must initially create a Contract in a non-Activated state. Client applications can subsequently activate a Contract by updating it and setting the value in its `Status` field to Activated; however, the `Status` field is the only field you can update when activating the Contract.

Once a Contract has been activated, your client application can't change its status; however, prior to activation, your client application can change the status value from Draft to InApproval via the API. Also, your client application can delete contracts whose status is Draft or InApproval but not when a contract status is Activated.

Client applications can use the API to create, update, delete, and query any Attachment associated with a contract.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ContractFeed (API version 18.0)
Feed tracking is available for the object.

ContractHistory
History is available for tracked fields of the object.

SEE ALSO:

ContractContactRole
ContractStatus

ContractContactRole

Represents the role that a given Contact plays on a Contract.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`ContactId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update

Field	Details
	Description ID of the Contact associated with this Contract.
`ContractId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the Contract.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`IsPrimary`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort,Update **Description** Specifies whether this Contact plays the primary role on this Contract (`true`) or not (`false`). Note that each contract has only one primary contact role. Default is `false`. Labels is **Primary**.
`Role`	**Type** picklist **Properties** Create, Filter, Nillable, Group, Sort, Update **Description** Name of the role played by the Contact on this Contract, such as Decision Maker, Approver, Buyer, and so on. Must be unique—there can't be multiple records in which the `ContractId`, `ContactId`, and `Role` values are identical. Different contacts can play the same role on the same contract. A contact can play different roles on the same contract.

Usage

Use the ContractContactRole object to define the role that a given Contact plays on a given Contract within the context of a specific Opportunity.

SEE ALSO:

ContractStatus

ContractLineItem

Represents a product covered by a service contract (customer support agreement). This object is available in API version 18.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`AssetId`	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** Required. ID of the Asset associated with the contract line item. Must be a valid asset ID.
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of the contract line item.
`Discount`	**Type** percent **Properties** Create, Filter, Nillable, Update **Description** The discount for the product as a percentage.

Field	Details
	When updating, if you specify `Discount` without specifying `TotalPrice`, the `TotalPrice` will be adjusted to accommodate the new `Discount` value, and the `UnitPrice` will be held constant. If you specify both `Discount` and `Quantity`, you must also specify either `TotalPrice` or `UnitPrice` so the system can determine which one to automatically adjust.
`EndDate`	**Type** date **Properties** Create, Filter, Nillable, Update **Description** The last day the contract line item is in effect.
`LastReferencedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
`LastViewedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (`LastReferencedDate`) but not viewed it.
`LineItemNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Update **Description** Automatically-generated number that identifies the contract line item.
`ListPrice`	**Type** currency **Properties** Filter, Nillable

Field	Details
	Description Corresponds to the `UnitPrice` on the PricebookEntry that is associated with this line item, which can be in the standard pricebook or a custom pricebook. A client application can use this information to show whether the unit price (or sales price) of the line item differs from the pricebook entry list price.
`LocationId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The location associated with the contract line item.
`ParentContractLineItemId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The line item's parent line item, if it has one.
`PricebookEntryId`	**Type** reference **Properties** Create, Filter, Update **Description** Required. ID of the associated PricebookEntry. Only exists if Product2 is enabled.
`Product2Id`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The product related to the contract line item.
`Quantity`	**Type** double **Properties** Create, Filter, Update **Description** Number of units of the contract line item (product) included in the associated service contract.

Field	Details
`RootContractLineItemId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** (Read only) The top-level line item in a contract line item hierarchy. Depending on where a line item lies in the hierarchy, its root could be the same as its parent.
`ServiceContractId`	**Type** reference **Properties** Create, Filter **Description** Required. ID of the ServiceContract associated with the contract line item. Must be a valid asset ID.
`StartDate`	**Type** date **Properties** Create, Filter, Nillable, Update **Description** The first day the contract line item is in effect.
`Status`	**Type** picklist **Properties** Filter, Nillable **Description** Status of the contract line item.
`Subtotal`	**Type** currency **Properties** Filter, Nillable **Description** Contract line item's sales price multiplied by the `Quantity`.
`TotalPrice`	**Type** currency **Properties** Filter, Nillable

Field	Details
	Description This field is available only for backward compatibility. It represents the total price of the ContractLineItem If you specify `Discount` and `Quantity`, this field or `UnitPrice` is required. This field is nillable, but you can't set both `TotalPrice` and `UnitPrice` to null in the same update request. To insert the `TotalPrice` for a contract line item via the API (given only a unit price and the quantity), calculate this field as the unit price multiplied by the quantity.
`UnitPrice`	**Type** currency **Properties** Create, Filter, Update **Description** The unit price for the contract line item. In the user interface, this field's value is calculated by dividing the total price of the contract line item by the quantity listed for that line item. Label is **Sales Price**. This field or `TotalPrice` is required. You can't specify both. If you specify `Discount` and `Quantity`, this field or `TotalPrice` is required.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ContractLineItemHistory
History is available for tracked fields of the object.

ContractStatus

Represents the status of a Contract, such as Draft, InApproval, Activated, Terminated, or Expired.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`ApiName`	**Type** string

Field	Details
	Properties Filter, Group, idLookup, Sort **Description** Uniquely identifies a picklist value so it can be retrieved without using an id or master label.
`IsDefault`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this is the default contract status value (`true`) or not (`false`) in the picklist.
`MasterLabel`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Master label for this contract status value. This display value is the internal label that does not get translated.
`SortOrder`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Number used to sort this value in the contract status picklist. These numbers are not guaranteed to be sequential, as some previous contract status values might have been deleted.
`StatusCode`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Code indicating the status of a contract. One of the following values: • `Draft` • `InApproval` • `Activated` Two other values (`Terminated` and `Expired`) are defined but are not available for use via the API.

Usage

This object represents a value in the contract status picklist. The contract status picklist provides additional information about the status of a Contract, such as its current state (`Draft`, `InApproval`, or `Activated`). You can query these records to retrieve the set of values in the contract status picklist, and then use that information while processing Contract objects to determine more information about a given contract. For example, the application could test whether a given contract is activated based on its `Status` value and the value of the `StatusCode` property in the associated ContractStatus object.

SEE ALSO:

ContractContactRole

ContractTag

Associates a word or short phrase with a Contract.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ItemId`	**Type** reference **Properties** Create, Filter **Description** ID of the tagged item.
`Name`	**Type** string **Properties** Create, Filter **Description** Name of the tag. If this value does not already exist, a new TagDefinition is created and becomes the parent of this Tag object. Otherwise, a TagDefinition with the same name becomes the parent of this Tag object. Parent relationships are created automatically.
`TagDefinitionId`	**Type** reference **Properties** Filter

Field Name	Details
	Description ID of the parent TagDefinition object that owns the tag.
`Type`	**Type** picklist **Properties** Create, Filter, Restricted picklist **Description** Defines the visibility of a tag. Valid values: • `Public`—The tag can be viewed and manipulated by all users in an organization. • `Personal`—The tag can be viewed or manipulated only by a user with a matching `OwnerId`.

Usage

ContractTag stores the relationship between its parent TagDefinition and the Contract being tagged. Tag objects act as metadata, allowing users to describe and organize their data.

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

Conversation

Represents a conversation between an end user and an agent. Available in API version 49.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`ConversationChannelId`	**Type** reference **Properties** Filter, Group, idLookup, Sort

Field	Details
	Description The record ID of the channel used to initialize the conversation. This can either be a messaging channel for the Messaging product or a call center for the Service Cloud Voice product. Available in API version 50.0 and later.
`ConversationIdentifier`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** A unique identifier generated for the conversation.
`EndTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that a conversation ends.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The autogenerated name of the conversation.
`StartTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that a conversation starts.

ConversationContextEntry

Represents the context of a message or an event in the chat history between an agent and a messaging user. This object is available in API version 47.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

As of Summer '20 and later, only authenticated internal and external users can access this object.

Fields

Field	Details
ConversationContextEntryName	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The autogenerated number of the entry.
CustomDetailContextKey	**Type** textarea **Properties** Create, Nillable **Description** The key or name of the pre-chat field specified by the admin in the pre-chat implementation, for example, `customer_email`.
CustomDetailContextValue	**Type** textarea **Properties** Create, Nillable **Description** The value entered in the pre-chat field by a user before starting the chat.
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The Conversation ID this entry is associated with.

ConversationEntry

Represents a message or an event in the chat history between an agent and a messaging user. This object is available in API version 43.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
ActorId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the author. The possible values can be `null` or any ID in the following domain set: • `BotDefinition` • `LiveChatVisitor` • `MessagingEndUser` • `User`
ActorName	**Type** string **Properties** Create, Filter, Nillable, Sort **Description** The name of the author sending the message or event.
ActorType	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The author of this entry in the chat history. The valid values include: • `Agent` • `Bot` • `EndUser` • `Supervisor`

Field	Details
	• `System`
`ClientDuration`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort **Description** The length in milliseconds for the entry. This field is used with voice messages and other applicable use cases. This value may be 0 if not set by the client. This field is available in API version 51.0 and later.
`ClientTimestamp`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort **Description** The timestamp sent by the client when it generated the entry. This field is available in API version 51.0 and later.
`ConversationId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The MessagingSession ID this entry belongs to.
`EntryEndTime`	**Type** datetime **Properties** Create, Filter, Nillable, Sort **Description** The timestamp that this entry ended in the chat history. This field is available in API version 48.0 and later.
`EntryTime`	**Type** datetime **Properties** Create, Filter, Sort **Description** The timestamp of this entry in the chat history.

Field	Details
`EntryTimeMilliSecs`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort **Description** The milliseconds value for the time when an entry was received by the server. Note that the related `EntryTime` field does not provide millisecond accuracy. This field is available in API version 51.0 and later.
`EntryType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The type of entry in the chat history. Can be a message (`text`) or an event. The possible values include: • `Text` • `AdminOptedIn` • `AdminOptedOut` • `BotEscalated` • `ChatbotClosedIdleSession` • `ChatbotEndedChatByAction`—Conversation ended by automated action • `ChatbotEndedTransferNotConfigured`—Conversation ended because transfer fail is not configured • `ChatbotEstablished` • `ChatbotNotEstablished` • `EndUserOptedIn` • `EndUserOptedOut`
`HasAttachments`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Indicates whether a message has attachments associated with it (`true`) or not (`false`).
`Message`	**Type** textarea **Properties** Create, Nillable

Field	Details
	Description The message or event sent by the author.
MessageDeliverTime	**Type** datetime **Properties** Create, Filter, Nillable, Sort **Description** Unused field reserved for future use.
MessageIdentifier	**Type** string **Properties** Create, Filter, Group, Nillable, Sort
MessageReadTime	**Type** datetime **Properties** Create, Filter, Nillable, Sort **Description** Unused field reserved for future use.
MessageSendTime	**Type** datetime **Properties** Create, Filter, Nillable, Sort **Description** Unused field reserved for future use.
MessageStatus	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The status of the message sent by the author. The valid values include: • Delivered • Error • Pending • Read • Sent

Field	Details
MessageStatusCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The code associated with a message status. `MessageStatusCode` is only populated when a message is undeliverable
Seq	**Type** int **Properties** Create, Filter, Group, Sort **Description** The sequence position of this entry in the chat history.
ServerReceivedTimestamp	**Type** dateTime **Properties** Create, Filter, Nillable, Sort **Description** The timestamp recorded when the server received the entry. This is a unique value and is used for ordering. This value can also be referred to as the “transcripted timestamp.” This field is available in API version 51.0 and later.

ConversationParticipant

Represents an active participant in a conversation. A new ConversationParticipant record is created each time a participant joins a conversation. This object is available in API version 49.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
AppType	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The type of app used by the participant, such as Facebook, SMS, or Voice. The nillable property is available in API version 51.0 and later.
ConversationId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The record ID of the conversation that this participant is part of.
JoinedTime	**Type** dateTime **Properties** Filter, Sort **Description** The date and time that a participant joined a conversation.
LastActiveTime	**Type** dateTime **Properties** Filter, Sort **Description** The date and time that a participant was last active during a conversation.
LeftTime	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that a participant left a conversation.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The autogenerated name of the conversation participants.
ParticipantContext	**Type** string

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** An identifier, such as a Facebook page, to add context about this participant.
`ParticipantEntityId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the record connected to this participant record, such as a Messaging End User or User record.
`ParticipantKey`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A value that uniquely identifies this participant.
`ParticipantRole`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The role of this participant in the conversation, such as Agent, End User, or Supervisor.

CorsWhitelistEntry

Cross-Origin Resource Sharing (CORS) enables web browsers to request resources from origins other than their own. For example, using CORS, JavaScript code at `https://www.example.com` could request a resource from `https://www.salesforce.com`. To access supported Salesforce APIs, Apex REST resources, and Lightning Out from JavaScript code in a web browser, add the origin serving the code to a Salesforce CORS allowlist.

Important: Where possible, we changed noninclusive terms to align with our company value of Equality. Because changing terms in our code can break current implementations, we maintained this object's name.

Supported Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
DeveloperName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the record in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This field is automatically generated but you can supply your own value if you create the record using the API. Note: When creating large sets of data, always specify a unique DeveloperName for each record. If no DeveloperName is specified, performance may slow while Salesforce generates one for each record.
Language	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** This picklist contains the following fully-supported languages: • Chinese (Simplified): zh_CN • Chinese (Traditional): zh_TW • Danish: da • Dutch: nl_NL • English: en_US • Finnish: fi • French: fr • German: de • Italian: it • Japanese: ja • Korean: ko • Norwegian: no • Portuguese (Brazil): pt_BR • Russian: ru • Spanish: es • Spanish (Mexico): es_MX Spanish (Mexico) defaults to Spanish for customer-defined translations. • Swedish: sv

Field Name	Details
	• Thai: `th` The Salesforce user interface is fully translated to Thai, but Help is in English.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Primary label for the CORS allowlist entry.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** For managed packages, this field is the namespace prefix assigned to the package. For unmanaged packages, this field is blank.
`UrlPattern`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The origin URL pattern must include the HTTPS protocol (unless you're using your localhost) and a domain name, and can include a port. The wildcard character (*) is supported and must be in front of a second-level domain name. For example, `https://*.example.com` adds all subdomains of `example.com` to the allowlist. The origin URL pattern can be an IP address. However, an IP address and a domain that resolve to the same address are not the same origin, and you must add them to the CORS allowlist as separate entries.

Usage

CORS is a W3C recommendation that enables web browsers to request resources from origins other than their own (cross-origin request). For example, using CORS, a JavaScript script at `https://www.example.com` could request a resource from `https://www.salesforce.com`.

If a browser that supports CORS makes a request to an origin in the Salesforce CORS allowlist, Salesforce returns the origin in the `Access-Control-Allow-Origin` HTTP header, along with any additional CORS HTTP headers. If the origin is not included in the allowlist, Salesforce returns HTTP status code 403.

Important: CORS does not support requests for unauthenticated resources, including OAuth endpoints. You must pass an OAuth token with requests that require it.

CreditMemo

Represents a document that is used to adjust or rectify errors made in an invoice. The invoice has already been processed and sent to a customer. This object is available in API version 48.0 and later.

A credit memo always decreases the balance of an invoice or invoice lines. Users can apply positive credit memos to positive invoices or invoice lines, and negative credit memos to negative invoices or invoice lines. For example, a $10 credit memo would reduce the balance of a $100 invoice line to $90. A -$10 credit memo would reduce the balance of a -$100 credit memo to -$110.

Supported Calls

`describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`

Special Access Rules

To access these entities, your org must have a Salesforce Order Management license. These entities are available only in Lightning Experience.

Fields

Field	Details
`Balance`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Amount of the credit memo available for allocation.
`BillToContactId`	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** Inherited from the account's Bill to Account.
`BillingAccountId`	**Type** reference **Properties** Filter, Group, Sort, Update **Description** The customer account for this invoice.

Field	Details
CreditDate	**Type** date **Properties** Filter, Group, Sort, Update **Description** The date that the credit memo was posted.
CreditMemoNumber	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** System number for the credit memo.
Description	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** Description of the credit memo.
DocumentNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** System-generated number for organization of financial documents. Can be sequential or random.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort

Field	Details
	Description The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`OwnerId`	**Type** reference **Properties** Filter, Group, Sort, Update **Description** The user who owns a credit memo record.
`ReferenceEntityId`	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** The ID of the order or order summary that created this credit memo.
`Status`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort, Update **Description** Status of the credit memo. Possible values are: • `Canceled`: Reserved for future use. • `Draft`: The credit memo is not yet recorded as a financial transaction. Certain fields can still be edited. • `Pending`: Reserved for future use. • `Posted`: The credit memo has been recorded as a financial transaction. Most fields can't be edited.
`TotalAdjustmentAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Sum of `TotalAmount`values for the credit memo's adjustment lines.
`TotalAmount`	**Type** currency

Field	Details
	Properties Filter, Nillable, Sort **Description** Sum of the credit memo's `TotalLineAmount` and `TotalAdjustmentAmount`.
`TotalAmountWithTax`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total credit memo amount, with tax included.
`TotalChargeAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Sum of `TotalAmount` values for the credit memo's charge lines. values for all of this credit memo's credit memo lines.
`TotalTaxAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Sum of `TotalAmount` values for the credit memo's tax lines.

CreditMemoLine

Represents a partial or full application of a credit memo's balance against an invoice or invoice line. This object is available in API version 48.0 and later.

Supported Calls

`describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`

Special Access Rules

To access these entities, your org must have a Salesforce Order Management license. These entities are available only in Lightning Experience.

Fields

Field	Details
AdjustmentAmount	**Type** currency **Properties** Filter, Nillable, Sort, Update **Description** Sum of adjustments made to the credit memo.
ChargeAmount	**Type** currency **Properties** Filter, Nillable, Sort, Update **Description** Sum of charges made to the credit memo.
CreditMemoId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the parent credit memo.
Description	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** Description of the credit memo line.
EndDate	**Type** date **Properties** Filter, Group, Nillable, Sort, Update **Description** For credit memos made from a time-based service, the end date of the billing for the service.
Name	**Type** string **Properties** Filter, Group, idLookup, Sort, Update

Field	Details
	Description Name of the credit memo line.
`Product2Id`	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** The product that was charged or ordered to create the credit memo line.
`ReferenceEntityItemId`	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** The order item or adjustment item that created the credit memo line.
`ReferenceEntityItemType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The type of transaction that created the credit memo line. Possible values are: • `DeliveryCharge` • `OrderProduct`
`ReferenceEntityItemTypeCode`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The type of object that created the credit memo line. Possible values are: • `Charge` • `Product`
`RelatedLineId`	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update

Field	Details
	Description The original invoice line that was adjusted or taxed.
StartDate	**Type** date **Properties** Filter, Group, Nillable, Sort, Update **Description** For credit memo lines made from a time-based service, the first date of the billing for the service.
Status	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** State of the credit memo line. Inherited from the invoice's status.
TaxAmount	**Type** currency **Properties** Filter, Nillable, Sort, Update **Description** Total tax for the credit memo.
TaxCode	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** The code used to calculate tax rate for the invoice line.
TaxEffectiveDate	**Type** date **Properties** Filter, Group, Nillable, Sort, Update **Description** The date used to calculate the credit memo line's TaxAmount.
TaxName	**Type** string

Field	Details
	Properties Filter, Group, Nillable, Sort, Update **Description** User-defined name for applied tax.
`TaxRate`	**Type** percent **Properties** Filter, Nillable, Sort, Update **Description** Percentage value used for calculating tax.
`TotalAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** The total amount of the credit memo line before any applicable tax.
`TotalAmountWithTax`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of tax for this credit memo line, with tax included. Sum of TotalAmount and TaxAmount.
`Type`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Shows the type of transaction for the invoice line. Possible values are: • `Adjustment` • `Charge` • `Tax`

Crisis

Represents a major crisis event that affects an Employee in an InternalOrganizationUnit. This object is available in API version 48.0 and later. In API version 49.0 and later, this object supports reports, criteria-based sharing rules, and history tracking, plus you can exclude individual fields from custom page layouts.

Work.com uses this object to track and describe crisis situations.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

To access this object, you must be assigned a Workplace Command Center permission set license and the Provides access to Workplace Command Center features system permission.

Fields

Field	Details
`CrisisType`	**Type** picklist **Properties** Create, Filter, Group, Sort, Update **Description** Required. The type or category of crisis. Possible values are: • `Economic Crisis` • `Natural Disaster` • `Pandemic` • `War`
`Description`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The crisis description.
`EndDate`	**Type** date

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The date the crisis ended.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. The crisis record name.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the user who currently owns this record. Default value is the user logged in to the API to perform the create operation.
`StartDate`	**Type** date **Properties** Create, Filter, Group, Sort, Update **Description** Required. The date the crisis started.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

CrisisHistory (API version 49.0)
History is available for tracked fields of the object.

CrisisOwnerSharingRule
Sharing rules are available for the object.

CrisisShare (API version 49.0)
Sharing is available for the object.

SEE ALSO:

Workplace Command Center for Work.com Developer Guide: Extend Work.com with Custom Solutions

CronJobDetail

Contains details about the associated scheduled job, such as the job's name and type. This object is available in API version 29.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`JobType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of the associated scheduled job. The following are the available job types. Each job type label is listed with its value in parenthesis. Use the job type value when querying for a specific job type. • `1`—Data Export • `3`—Dashboard Refresh • `4`—Reporting Snapshot • `6`—Scheduled Flow • `7`—Scheduled Apex • `8`—Report Run • `9`—Batch Job • `A`—Reporting Notification

Field	Details
`Name`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The name of the associated scheduled job.

Usage

Use this object to query additional information about a scheduled job, such as the job's name and type.

CronTrigger

Contains schedule information for a scheduled job. CronTrigger is similar to a cron job on UNIX systems. This object is available in API version 17.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`CronExpression`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The cron expression used to initiate the schedule. Syntax: ***`Seconds Minutes Hours Day_of_month Month Day_of_week Optional_year`*** See `schedule(jobName, cronExpression, schedulableClass)` in the *Apex Developer Guide*.
`CronJobDetailId`	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The ID of the CronJobDetail record containing more details about this scheduled job.
`EndTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time when the job either finished or will finish.
`NextFireTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The next date and time the job is scheduled to run. `null` if the job is not scheduled to run again.
`OwnerId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Owner of the job.
`PreviousFireTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The most recent date and time the job ran. `null` if the job has not run before current local time.
`StartTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time when the most recent iteration of the scheduled job started.
`State`	**Type** string

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** The current state of the job. The job state is managed by the system. Possible values are: • `WAITING`—The job is waiting for execution. • `ACQUIRED`—The job has been picked up by the system and is about to execute. • `EXECUTING`—The job is executing. • `COMPLETE`—The trigger has fired and is not scheduled to fire again. • `ERROR`—The trigger definition has an error. • `DELETED`—The job has been deleted. • `PAUSED`—A job can have this state during patch and major releases. After the release has finished, the job state is automatically set to `WAITING` or another state. • `BLOCKED`—Execution of a second instance of the job is attempted while one instance is running. This state lasts until the first job instance is completed. • `PAUSED_BLOCKED`—A job has this state due to a release occurring. When the release has finished and no other instance of the job is running, the job's status is set to another state.
`TimesTriggered`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of times this job has been triggered.
`TimeZoneSidKey`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Returns the timezone ID. For example, `America/Los_Angeles`.

Usage

Use this object to query scheduled jobs in your organization.

CspTrustedSite

Represents a CSP Trusted Site. The Lightning Component framework uses Content Security Policy (CSP) to impose restrictions on content. The main objective is to help prevent cross-site scripting (XSS) and other code injection attacks. To use third-party APIs that make requests to an external (non-Salesforce) server or to use a WebSocket connection, add a CSP Trusted Site. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`Context`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Declares the scope of trust for the listed third-party host. Possible values are: • `All`—Whitelists the host for both Lightning Experience and Experience Builder sites. • `Communities`—Whitelists the host for Experience Builder sites only. • `FieldServiceMobileExtension`—Whitelists the host for the Field Service Mobile Extensions only. • `LEX`—Whitelists the host for Lightning Experience only.
`Description`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The description of the trusted site. Limit: 255 characters.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The developer name of the trusted site.

Field	Details
EndpointUrl	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The URL for the trusted site.
IsActive	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the trusted site is active.
IsApplicableToConnectSrc	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates if Lightning components can load URLs using script interfaces from this site.
IsApplicableToFontSrc	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates if Lightning components can load fonts from this site.
IsApplicableToFrameSrc	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates if Lightning components can load resources contained in `<iframe>` elements from this site.
IsApplicableToImgSrc	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description Indicates if Lightning components can load images from this site.
`IsApplicableToMediaSrc`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates if Lightning components can load audio and video from this site.
`IsApplicableToStyleSrc`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates if Lightning components can load style sheets from this site.
`Language`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language for the trusted site.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Master label for this trusted site.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Namespace prefix for this trusted site.

Usage

CSP is a W3C standard that defines rules to control the source of content that can be loaded on a page. All CSP rules work at the page level, and apply to all components and libraries. By default, the framework's headers allow content to be loaded only from secure (HTTPS) URLs and forbid XHR requests from JavaScript.

When you define a CSP Trusted Site, you can add the site's URL to the list of allowed sites for the following directives in the CSP header.

- `connect-src`
- `frame-src`
- `img-src`
- `style-src`
- `font-src`
- `media-src`

This change to the CSP header directives allows Lightning components to load resources, such as images, styles, and fonts, from the site. It also allows client-side code to make requests to the site.

CurrencyType

Represents the currencies used by an organization for which the multicurrency feature is enabled.

Supported Calls

`create()`, `describeSObjects()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`

Special Access Rules

- This object is not available in single-currency organizations.
- You need the "Customize Application" permission to edit this object.
- Your client application can't delete this object.
- Customer Portal users can't access this object.

Fields

Field	Details
`ConversionRate`	**Type** double **Properties** Filter **Description** Required. Conversion rate of this currency type against the corporate currency.
`DecimalPlaces`	**Type** int

Field	Details
	Properties Filter **Description** Required. For this currency, specifies the number of digits to the right of the decimal point, such as zero (`0`) for JPY or `2` for USD.
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether this currency type is active (`true`) or not (`false`). Inactive currency types do not appear in picklists in the user interface. Label is **Active**. This field defaults to `false` if no value is provided when updating or inserting a record.
`IsCorporate`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether this currency type is the corporate currency (`true`) or not (`false`). Label is **Corporate Currency**. All other currency conversion rates are applied against this corporate currency. If a currency is already defined as the corporate currency in the user interface, it can't be unset. When a non-corporate currency is set to a corporate currency, the system reconfigures all conversion rates based on the new corporate currency.
`IsoCode`	**Type** picklist **Properties** Filter, Restricted picklist **Description** Required. ISO code of the currency. Must be one of the valid alphabetic, three-letter currency ISO codes defined by the ISO 4217 standard, such as `USD`, `GBP`, or `JPY`. Must be unique within your organization. Label is **Currency ISO Code**.

Usage

This object is for multicurrency organizations only. Use this object to define the currencies your organization uses.

When updating an existing record, make sure to provide values for all fields to avoid undesired changes to the CurrencyType. For example, if a value for `IsActive` is not provided, the default (`false`) is used, which could result in a currently active CurrencyType becoming inactive.

SEE ALSO:

DatedConversionRate

Object Basics

CustomBrand

Represents a custom branding and color scheme. This object is available in API version 28.0 and later.

Supported Calls

`create()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

This object is available only when your org has digital experiences enabled.

Fields

Field Name	Details
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the parent entity that this branding applies to. The parent entity can be an Experience Cloud site, organization, topic, or reputation level. The branding applies to the entity that the `ParentId` references. For example, if the `ParentId` references a network ID, the branding applies to that Experience Cloud site only, and if the `ParentId` references an organization ID, the branding applies to the organization that it is accessed through, and so on. Label is `Branded Entity ID`.

Usage

Use this object along with CustomBrandAsset to apply a custom branding scheme to your Experience Cloud site. The branding scheme for the site shows in both the user interface and in the Salesforce mobile app. You must have Create and Manage Experiences to customize site branding.

You can also use this object to apply a custom branding scheme to your org when it is accessed through the Salesforce mobile app.

SEE ALSO:

Network

CustomBrandAsset

Represents a branding element in a custom branding scheme. For example, a color, logo image, header image, or footer text. A CustomBrandAsset can apply to an Experience Cloud site or to an org using the Salesforce mobile app. This object is available in API version 28.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

This object is available only when your org has digital experiences enabled.

Fields

Field Name	Details
`AssetCategory`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Values include: • `MotifZeronaryColor`—The background color for the header. Label is `Zeronary motif color`. If this CustomBrandAsset is for a network, this is the header color for the network. If it is for an org, this is the header color when users access the Salesforce mobile app. • `MotifPrimaryColor`—The color used for the active tab. Label is `Primary motif color`. Not used for the Salesforce mobile app branding. • `MotifSecondaryColor`—The color used for the top borders of lists and tables. Label is `Secondary motif color`. Not used for the Salesforce mobile app branding. • `MotifTertiaryColor`—The background color for section headers on edit and detail pages. Label is `Tertiary motif color`.

Field Name	Details
	Not used for the Salesforce mobile app branding. • `MotifQuaternaryColor`—If this CustomBrandAsset is for a network, this is the background color for network pages. If it is for an org, this is the background color on a splash page. Label is `Quaternary motif color`. • `MotifZeronaryComplementColor`—Font color used with `zeronaryColor`. Label is `Zeronary motif colors complement color`. • `MotifPrimaryComplementColor`—Font color used with `primaryColor`. Label is `Primary motif colors complement color`. Not used for the Salesforce mobile app branding. • `MotifTertiaryComplementColor`—Font color used with `tertiaryColor`. Label is `Tertiary motif colors complement color`. Not used for the Salesforce mobile app branding. • `MotifQuaternaryComplementColor`—Font color used with `quaternaryColor`. Label is `Quaternary motif colors complement color`. Not used for the Salesforce mobile app branding. • `PageHeader`—An image that appears on the header of the pages. Can be an .html, .gif, .jpg, or .png file. Label is `Page Header`. Not used for the Salesforce mobile app branding. • `PageFooter`—An image that appears on the footer of the pages. Must be an .html file. Label is `Page Footer`. Not used for the Salesforce mobile app branding. • `LoginFooterText`—The text that appears in the footer of the login page. Label is `Footer text displayed on the login page`. Not used for the Salesforce mobile app branding. • `LoginLogoImageId`—The logo that appears on the login page for external users. In the Salesforce mobile app, this logo also appears on the Experience Cloud site splash page. Label is `Logo image displayed on the login page`. • `LargeLogoImageId`—Only used for the Salesforce mobile app. The logo that appears on the splash page when you start the Salesforce mobile app. Label is `Large logo image`. • `SmallLogoImageId`—Only used for the Salesforce mobile app. The logo that appears on the publisher in the Salesforce mobile app. Label is `Small logo image`.

Field Name	Details
	• `StaticLogoImageURL`—The logo that appears on the login page for external users. Label is `Static logo image url`. • `LoginQuaternaryColor`—The background color that appears on the Experience Cloud site login page for external users. Label is `Login background color`. • `LoginRightFrameUrl`—The URL to the contents that appears on right side of the Experience Cloud site login page for external users. Label is `Login right frame url`. • `LogoAssetId`—Navigation tile menu item images. Label is `Logo asset image`. • `LoginPrimaryColor`—The background color of the login button. Label is `Login primary color`. • `LoginBackgroundImageUrl`—The path to the image URL that appears as the background on the Experience Cloud site's login page. Label is `Background image url`. • `LargeLogoAssetId`—Navigational topic images. Label is `Large logo asset image`. • `MediumLogoAssetId`—Featured topic images. Label is `Medium logo asset image`.
`AssetSourceId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the document uploaded to the Documents folder if the value of `AssetCategory` is: • `PageHeader` • `PageFooter` • `LoginLogoImageId` • `LargeLogoImageId` • `SmallLogoImageId` ID of the content asset if the value of the `AssetCategory` is: • `LogoAssetId` • `LargeLogoAssetId` • `MediumLogoAssetId`
`CustomBrandId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update

Field Name	Details
	Description ID of the associated CustomBrand .
ForeignKeyAssetId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** This field was removed in API version 41.0, and is available in earlier versions for backward compatibility only. Use AssetSourceId instead. ID of the document used if the value of AssetCategory is PageHeader, PageFooter, or LoginLogoImageId.
TextAsset	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Text used if the AssetCategory is LoginFooterText.

Usage

Use this object to add basic branding elements—color scheme, header or footer images, login page logo, or footer text—to the branding scheme (CustomBrand) for your Experience Cloud site. You must have Create and Manage Experiences to customize site branding.

If you're using digital experiences in the Salesforce mobile app, the loading page shows the logo.

SEE ALSO:

Network

CustomHelpMenuItem

Represents the items within a section of the Lightning Experience help menu that the admin added to display custom, org-specific help resources. This object is available in API version 44.0 and later.

Supported Calls

create(), delete(), describeSObjects(), query(), retrieve(), update(), upsert()

Packaging Considerations

Although you can package custom Help Menu section information, the section won't appear in the Help Menu Setup page or the Help Menu user interface of orgs where the package is installed. Instead, customers must view the data in the CustomHelpMenuItem and CustomHelpMenuSection objects and then manually add resources on the Help Menu Setup page. See Define Custom Help for the Lightning Experience Help Menu for more information.

Fields

Field	Details
`LinkUrl`	**Type** url **Properties** Create, Filter, Sort, Update **Description** Required. The URL for the resource. Specify up to 1,000 characters.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. The name of the resource. Specify up to 100 characters.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the custom help section the item belongs to.
`SortOrder`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** Required. The order of the item within the custom section. Valid values are 1 through 15.

CustomHelpMenuSection

Represents a section of the Lightning Experience help menu that the admin added to display custom, org-specific help resources. This object is available in API version 44.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Packaging Considerations

Although you can package custom Help Menu section information, the section won't appear in the Help Menu Setup page or the Help Menu user interface of orgs where the package is installed. Instead, customers must view the data in the CustomHelpMenuItem and CustomHelpMenuSection objects and then manually add resources on the Help Menu Setup page. See Define Custom Help for the Lightning Experience Help Menu for more information.

Fields

Field	Details
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the custom help section in the API. This name can contain only underscores and alphanumeric characters and must be unique in your organization. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. The label corresponds to section title in the user interface. Limit: 80 characters. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`Language`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Required. Language of the label. Possible values are: • da (Danish) • de (German) • en_US (English) • es (Spanish) • es_MX (Spanish (Mexico)) • fi (Finnish) • fr (French) • it (Italian)

Field	Details
	• ja (Japanese) • ko (Korean) • nl_NL (Dutch) • no (Norwegian) • pt_BR (Portuguese (Brazil)) • ru (Russian) • sv (Swedish) • th (Thai) • zh_CN (Chinese (Simplified)) • zh_TW (Chinese (Traditional))
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. The name of the resource. Specify up to 100 characters.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.

CustomHttpHeader

Represents a custom HTTP header that provides context information from Salesforce such as region, org details, or the role of the person viewing the external object. This object is available in API version 43.0 and later.

Supported Calls

`describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

As of Spring '20 and later, only authenticated internal and external users can access this object.

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Filter, Nillable, Sort **Description** A text description of the header field's purpose.
`HeaderFieldName`	**Type** string **Properties** Filter, Group, Sort **Description** Name of the header field. The name must contain at least one alphanumeric character or underscore. It can also include: ! # $ % & ' * + - . ^ _ ` | ~
`HeaderFieldValue`	**Type** string **Properties** Filter, Sort **Description** A formula that resolves to the value for the header. The values in the formula must evaluate to a string. If the formula resolves to null and an empty string, the header isn't sent.
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field Name	Details
	Description Indicates whether the custom HTTP header is available to use.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the entity that the custom HTTP header is related to.

Usage

For each OData external data source, define up 10 HTTP headers to request data.

Note: HTTP headers aren't supported on named credentials.

CustomNotificationType

Stores information about custom notification types. This object is available in API version 47.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`CustomNotifTypeName`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Unique, Update **Description** Specifies a notification type name. The notification type name is unique within your organization. Maximum number of characters: 80.
`Description`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description Specifies a general description of the notification type, which is displayed with the notification type name. Maximum number of characters: 255.
`Desktop`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the desktop delivery channel is enabled (`true`) or not (`false`). The default is `false`.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Specifies the API name of the notification type.
`Language`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Specifies the language of the custom notification type. The value for this field is the language value of the org.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Specifies the notification type label.
`Mobile`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the mobile delivery channels is enabled (`true`) or not (`false`). The default is `false`.

Field	Details
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Specifies the namespace of the notification type, if installed with a managed package.

CustomPermission

Represents a permission created to control access to a custom process or app, such as sending email. This object is available in API version 31.0 and later.

Supported Calls

`describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

As of Summer ’20 and later, only users who have one of these permissions can access this object:

- View Setup and Configuration
- Manage Session Permission Set Activations
- Assign Permission Sets

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Filter, Group, Nillable, Sort **Description** A description of the custom permission. Limit: 255 characters.
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort

Field Name	Details
	Description The unique name of the custom permission in the API. This name can contain only underscores and alphanumeric characters and must be unique in your organization. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. The label corresponds to **Name** in the user interface. Limit: 80 characters. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`IsLicensed`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** When enabled (true) indicates that the appropriate Salesforce license is required before accessing the permission. This field is available in API version 50.0 and later.
`Language`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language of the custom permission. Valid values are: • Chinese (Simplified): `zh_CN` • Chinese (Traditional): `zh_TW` • Danish: `da` • Dutch: `nl_NL` • English: `en_US` • Finnish: `fi` • French: `fr` • German: `de` • Italian: `it` • Japanese: `ja` • Korean: `ko` • Norwegian: `no` • Portuguese (Brazil): `pt_BR` • Russian: `ru` • Spanish: `es`

Field Name	Details
	• Spanish (Mexico): `es_MX` Spanish (Mexico) defaults to Spanish for customer-defined translations. • Swedish: `sv` • Thai: `th` The Salesforce user interface is fully translated to Thai, but Help is in English.
`MasterLabel`	**Type** string **Properties** Filter, Group, Sort **Description** The custom permission label, which corresponds to **Label** in the user interface. Limit: 80 characters.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.

Usage

Use the CustomPermission object to determine users' access to custom permissions.

For example, to query all permission sets where the Button1 permission is enabled:

```
SELECT Id, DeveloperName,
(select Id, Parent.Name, Parent.Profile.Name from SetupEntityAccessItems)
FROM CustomPermission
WHERE DeveloperName = 'Button1'
```

To query all permission sets and profiles with custom permissions:

```
SELECT Assignee.Name, PermissionSet.Id,
PermissionSet.Profile.Name,
PermissionSet.isOwnedByProfile,
PermissionSet.Label
FROM PermissionSetAssignment
WHERE PermissionSetId
IN (SELECT ParentId
   FROM SetupEntityAccess
   WHERE SetupEntityType =
'CustomPermission')
```

To query for all SetupEntityAccess rows with custom permissions:

```
SELECT Id,ParentId,Parent.Name, SetupEntityId
FROM SetupEntityAccess
WHERE SetupEntityType='CustomPermission'
AND ParentId
IN (SELECT Id
   FROM PermissionSet
   WHERE isOwnedByProfile = false)
```

SEE ALSO:

CustomPermissionDependency

PermissionSet

Profile

SetupEntityAccess

CustomPermissionDependency

Represents the dependency between two custom permissions when one custom permission requires that you enable another custom permission. This object is available in API version 32.0 and later.

Supported Calls

`describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

As of Spring '20 and later, only users with View Setup and Configuration permission can access this object.

Fields

Field Name	Details
`CustomPermissionId`	**Type** reference

Field Name	Details
	Properties Filter, Group, Sort **Description** The ID of the custom permission that requires the permission that's specified in `RequiredCustomPermissionId`.
`RequiredCustomPermissionId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the custom permission that must be enabled when `CustomPermissionId` is enabled.

Usage

The following Apex class contains a method that returns the IDs of all custom permissions that are required for the given custom permission ID. To use this class, save it in your organization.

```
public class CustomPermissionUtil {
   public String[] getAllRequiredCustomPermissions(String customPermId) {
      return getAllRequiredHelper(new String[]{customPermId});
   }

   private String[] getAllRequiredHelper(String[] customPermIds) {
      CustomPermissionDependency[] requiredPerms = [SELECT RequiredCustomPermissionId
                                                     FROM CustomPermissionDependency
                                                     WHERE CustomPermissionId
                                                     IN :customPermIds];
      String[] requiredPermIds = new String[]{};
      for (CustomPermissionDependency cpd : requiredPerms) {
         requiredPermIds.add(cpd.RequiredCustomPermissionId);
      }
      if (requiredPermIds.size() > 0) {
         customPermIds.addall(getAllRequiredHelper(requiredPermIds));
         return customPermIds;
      } else {
         return customPermIds;
      }
   }
}
```

For more information about using Apex classes, see the *Lightning Platform Apex Code Developer's Guide*.

SEE ALSO:

CustomPermission

DandBCompany

Represents a Dun & Bradstreet® company record, which is associated with an account added from Data.com. This object is available in API version 25.0 and later.

Note: When your Data.com Prospector or Data.com Clean contract expires, Data.com features, objects, and fields will be removed from your org.

To support customers' needs around compliance and to remain a leader in trust and privacy, Salesforce removed all contact data from the Data.com service on February 1, 2021.

For more information, see Data.com Prospector and Clean Retirement.

Warning: You can update fields in the DandBCompany object; however, field changes may be overwritten by Data.com Clean jobs or by using the Data.com Clean button.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Only organizations with Data.com Premium Prospector or Data.com Premium Clean can access this object.

Fields

Field Name	Details
`Address`	**Type** address **Properties** Filter, Nillable **Description** The compound form of the address. Read-only. See Address Compound Fields for details on compound address fields.
`City`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The city where a company is physically located. Maximum size is 40 characters.
`CompanyCurrencyIsoCode`	**Type** picklist

Field Name	Details
	Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The code used to represent a company's local currency. This data is provided by the International Organization for Standardization (ISO) and is based on their three-letter currency codes. For example, USD is the ISO code for United States Dollar. Maximum size is 3 characters.
`Country`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The country where a company is physically located. Maximum size is 40 characters.
`CountryAccessCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The required code for international calls. Maximum size is 4 characters.
`CurrencyCode`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The currency in which the company's sales volume is expressed. The full list of values can be found at the Optimizer Resources page maintained by Dun & Bradstreet. Maximum size is 4 characters.
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** A brief description of the company, which may include information about its history, its products and services, and its influence on a particular industry. Maximum size is 32000 characters.
`DomesticUltimateBusinessName`	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The primary name of the Domestic Ultimate, which is the highest ranking subsidiary, specified by country, within an organization's corporate structure. Maximum size is 255 characters.
`DomesticUltimateDunsNumber`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The D-U-N-S Number for the Domestic Ultimate, which is the highest ranking subsidiary, specified by country, within an organization's corporate structure. Maximum size is 9 characters.
`DunsNumber`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The Data Universal Numbering System (D-U-N-S) number is a unique, nine-digit number assigned to every business location in the Dun & Bradstreet database that has a unique, separate, and distinct operation. D-U-N-S numbers are used by industries and organizations around the world as a global standard for business identification and tracking. Maximum size is 9 characters.
`EmployeeQuantityGrowthRate`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The yearly growth rate of the number of employees in a company expressed as a decimal percentage. The data includes the total employee growth rate for the past two years.
`EmployeesHere`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The number of employees at a specified location, such as a branch location. Maximum size is 15 characters.

Field Name	Details
EmployeesHereReliability	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The reliability of the `EmployeesHere` figure. Available values include: • 0—Actual number • 1—Low • 2—Estimated (for all records) • 3—Modeled (for non-US records)
EmployeesTotal	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The total number of employees in the company, including all subsidiary and branch locations. This data is only available on records that have a value of *`Headquarters/Parent`* in the `LocationStatus` field. Maximum size is 15 characters.
EmployeesTotalReliability	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The reliability of the `EmployeesTotal` figure. Available values include: • 0—Actual number • 1—Low • 2—Estimated (for all records) • 3—Modeled (for non-US records) A blank value indicates this data is unavailable.
FamilyMembers	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The total number of family members, worldwide, within an organization, including the Global Ultimate, its subsidiaries (if any), and its branches (if any). Maximum size is 5 characters.

Field Name	Details
Fax	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The company's facsimile number.
FifthNaics	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional NAICS code used to further classify an organization by industry. Maximum size is 6 characters.
FifthNaicsDesc	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization's line of business, based on the corresponding NAICS code. Maximum size is 120 characters.
FifthSic	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional SIC code used to further classify an organization by industry. Maximum size is 8 characters.
FifthSic8	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional SIC code used to further classify an organization by industry. Maximum size is 8 characters.
FifthSic8Desc	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization's line of business, based on the corresponding SIC code. Maximum size is 80 characters.
`FifthSicDesc`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization's line of business, based on the corresponding SIC code. Maximum size is 80 characters.
`FipsMsaCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The Federal Information Processing Standards (FIPS) and the Metropolitan Statistical Area (MSA) codes identify the organization's location. The MSA codes are defined by the US Office of Management and Budget. Maximum size is 5 characters.
`FipsMsaDesc`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization's FIPS MSA code. Maximum size is 255 characters.
`FortuneRank`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The numeric value of the company's Fortune 1000 ranking. A null or blank value means that the company isn't ranked as a Fortune 1000 company.
`FourthNaics`	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** An additional NAICS code used to further classify an organization by industry. Maximum size is 6 characters.
FourthNaicsDesc	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization's line of business, based on the corresponding NAICS code. Maximum size is 120 characters.
FourthSic	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional SIC code used to further classify an organization by industry. Maximum size is 8 characters.
FourthSic8	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional SIC code used to further classify an organization by industry. Maximum size is 8 characters.
FourthSic8Desc	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization's line of business, based on the corresponding SIC code. Maximum size is 80 characters.
FourthSicDesc	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description A brief description of an organization's line of business, based on the corresponding SIC code. Maximum size is 80 characters.
`GeoCodeAccuracy`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The level of accuracy of a location's geographical coordinates compared with its physical address. Available values include: • A – *`Non-US rooftop accuracy`* • B – *`Block level`* • C – *`Places the address in the correct city`* • D – *`Rooftop level`* • I – *`Street intersection`* • M – *`Mailing address level`* • N – *`Not matched`* • P – *`PO BOX location`* • S – *`Street level`* • T – *`Census tract level`* • Z – *`ZIP code level`* • 0 (zero)– *`Geocode could not be assigned`*
`GlobalUltimateBusinessName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The primary name of the Global Ultimate, which is the highest entity within an organization's corporate structure and may oversee branches and subsidiaries. Maximum size is 255 characters.
`GlobalUltimateDunsNumber`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The D-U-N-S Number of the Global Ultimate, which is the highest entity within an organization's corporate structure and may oversee branches and subsidiaries. Maximum size is 9 characters.

Field Name	Details
`GlobalUltimateTotalEmployees`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The total number of employees at the Global Ultimate, which is the highest entity within an organization's corporate structure and may oversee branches and subsidiaries. Maximum size is 15 characters.
`ImportExportAgent`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Identifies whether a business imports goods or services, exports goods or services, and/or is an agent for goods. Available values include: • A—Importer/exporter/agent • B—Importer/exporter • C—Importer • D—Importer/agent • E—Exporter/agent • F—Agent (keeps no inventory and does not take title goods) • G—None or data not available • H—Exporter
`IncludedInSnP500`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A true or false value. If `true`, the company is listed in the S&P 500 Index. If `false`, the company isn't listed in the S&P 500 Index.
`Latitude`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Used with longitude to specify a precise location, which is then used to assess the Geocode Accuracy. Maximum size is 11 characters.

Field Name	Details
`LegalStatus`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Identifies the legal structure of an organization.
`LocationStatus`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Identifies the organizational status of a company. Available values are *`Single location`*, *`Headquarters/Parent`*, and *`Branch`*. Available values include: • 0—Single location (no other entities report to the business) • 1—Headquarters/parent (branches and/or subsidiaries report to the business) • 2—Branch (secondary location to a headquarters location)
`Longitude`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Used with latitude to specify a precise location, which is then used to assess the Geocode Accuracy. Maximum size is 11 characters.
`MailingAddress`	**Type** address **Properties** Filter, Nillable **Description** The compound form of the mailing address. Read-only. See Address Compound Fields for details on compound address fields.
`MailingCity`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The city where a company has its mail delivered. Maximum size is 40 characters.

Field Name	Details
`MailingCountry`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The country where a company has its mail delivered. Maximum size is 40 characters.
`MailingPostalCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The postal code that a company uses on its mailing address. Maximum size is 20 characters.
`MailingState`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The state where a company has its mail delivered. Maximum size is 20 characters.
`MailingStreet`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street address where a company has its mail delivered. Maximum size is 255 characters.
`MarketingPreScreen`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The probability that a company will pay with a significant delay compared to the agreed terms. The risk level is based on the standard Commercial Credit Score, and ranges from low risk to high risk. Available values include: • L—*`Low risk of delinquency`* • M—*`Moderate risk of delinquency`* • H—*`High risk of delinquency`*

Field Name	Details
	Important: Use this information for marketing pre-screening purposes only.
`MarketingSegmentationCluster`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Twenty-two distinct, mutually exclusive profiles, created as a result of cluster analysis of Dun & Bradstreet data for US organizations.
`MinorityOwned`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates whether an organization is owned or controlled by a member of a minority group. Available values include: • Y—Minority owned • N—Not minority owned
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The primary or registered name of a company. Maximum size is 255 characters.
`NationalId`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The identification number used in some countries for business registration and tax collection. Maximum size is 255 characters.
`NationalIdType`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update

Field Name	Details
	Description A code value that identifies the type of national identification number used. The full list of values can be found at the Optimizer Resources page maintained by Dun & Bradstreet. Maximum size is 5 characters.
OutOfBusiness	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates whether the company at the specified address has discontinued operations. Available values include: • Y—Out of business • N—Not out of business
OwnOrRent	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates whether a company owns or rents the building it occupies. Available values include: • 0—Unknown or not applicable • 1—Owns • 2—Rents
ParentOrHqBusinessName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The primary name of the parent or headquarters company. Maximum size is 255 characters.
ParentOrHqDunsNumber	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The D-U-N-S Number for the parent or headquarters. Maximum size is 9 characters.

Field Name	Details
Phone	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A company's primary telephone number.
PostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The postal code that corresponds to a company's physical location. Maximum size is 20 characters.
PremisesMeasure	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A numeric value for the measurement of the premises.
PremisesMeasureReliability	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A descriptive accuracy of the measurement such as actual, estimated, or modeled.
PremisesMeasureUnit	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A descriptive measurement unit such as acres, square meters, or square feet.
PrimaryNaics	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description The six-digit North American Industry Classification System (NAICS) code is the standard used by business and government to classify business establishments according to their economic activity for the purpose of collecting, analyzing, and publishing statistical data related to the US business economy. The full list of values can be found at the Optimizer Resources page maintained by Dun & Bradstreet. Maximum size is 6 characters.
`PrimaryNaicsDesc`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization's line of business, based on its NAICS code. Maximum size is 120 characters.
`PrimarySic`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The four-digit Standard Industrial Classification (SIC) code is used to categorize business establishments by industry. The full list of values can be found at the Optimizer Resources page maintained by Dun & Bradstreet. Maximum size is 4 characters.
`PrimarySic8`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The eight-digit Standard Industrial Classification (SIC) code is used to categorize business establishments by industry. The full list of values can be found at the Optimizer Resources page maintained by Dun & Bradstreet. Maximum size is 8 characters.
`PrimarySic8Desc`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description A brief description of an organization’s line of business, based on its SIC code. The full list of values can be found at the Optimizer Resources page maintained by Dun & Bradstreet. Maximum size is 80 characters.
PrimarySicDesc	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization’s line of business, based on its SIC code. Maximum size is 80 characters.
PriorYearEmployees	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The total number of employees for the prior year.
PriorYearRevenue	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The annual revenue for the prior year.
PublicIndicator	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates whether ownership of the company is public or private. Available values include: • Y—Public • N—Private
SalesTurnoverGrowthRate	**Type** double **Properties** Create, Filter, Nillable, Sort, Update

Field Name	Details
	Description The increase in annual revenue from the previous value for an equivalent period expressed as a decimal percentage.
`SalesVolume`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The total annual sales revenue in the headquarters' local currency. Dun & Bradstreet tracks revenue data for publicly traded companies, Global Ultimates, Domestic Ultimates, and some headquarters.
`SalesVolumeReliability`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The reliability of the `SalesVolume` figure. Available values include: • 0—Actual number • 1—Low • 2—Estimated (for all records) • 3—Modeled (for non-US records)
`SecondNaics`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional NAICS code used to further classify an organization by industry. Maximum size is 6 characters.
`SecondNaicsDesc`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization's line of business, based on the corresponding NAICS code. Maximum size is 120 characters.
`SecondSic`	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** An additional SIC code used to further classify an organization by industry. Maximum size is 8 characters.
`SecondSic8`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional SIC code used to further classify an organization by industry. Maximum size is 8 characters.
`SecondSic8Desc`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization’s line of business, based on the corresponding SIC code. Maximum size is 80 characters.
`SecondSicDesc`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization’s line of business, based on the corresponding SIC code. Maximum size is 80 characters.
`SixthNaics`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional NAICS code used to further classify an organization by industry. Maximum size is 6 characters.
`SixthNaicsDesc`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description A brief description of an organization’s line of business, based on the corresponding NAICS code. Maximum size is 120 characters.
`SixthSic`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional SIC code used to further classify an organization by industry. Maximum size is 8 characters.
`SixthSic8`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional SIC code used to further classify an organization by industry. Maximum size is 8 characters.
`SixthSic8Desc`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization’s line of business, based on the corresponding SIC code. Maximum size is 80 characters.
`SixthSicDesc`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization’s line of business, based on the corresponding SIC code. Maximum size is 80 characters.
`SmallBusiness`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update

Field Name	Details
	Description Indicates whether the company is designated a small business as defined by the Small Business Administration of the US government. Available values include: • Y—Small business site • N—Not small business site
State	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The state where a company is physically located. Maximum size is 20 characters.
StockExchange	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The corresponding exchange for a company's stock symbol. For example: NASDAQ or NYSE. Maximum size is 16 characters.
StockSymbol	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The abbreviation used to identify publicly traded shares of a particular stock. Maximum size is 6 characters.
Street	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street address where a company is physically located. Maximum size is 255 characters.
Subsidiary	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update

Field Name	Details
	Description Indicates whether a company is more than 50 percent owned by another organization. Available values include: • 0—Not subsidiary of another organization • 3—Subsidiary of another organization
ThirdNaics	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional NAICS code used to further classify an organization by industry. Maximum size is 6 characters.
ThirdNaicsDesc	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization's line of business, based on the corresponding NAICS code. Maximum size is 120 characters.
ThirdSic	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional SIC code used to further classify an organization by industry. Maximum size is 8 characters.
ThirdSic8	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional SIC code used to further classify an organization by industry. Maximum size is 8 characters.
ThirdSic8Desc	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description A brief description of an organization's line of business, based on the corresponding SIC code. Maximum size is 80 characters.
ThirdSicDesc	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization's line of business, based on the corresponding SIC code. Maximum size is 80 characters.
TradeStyle1	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A name, different from its legal name, that an organization may use for conducting business. Similar to "Doing business as" or "DBA". Maximum size is 255 characters.
TradeStyle2	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional tradestyle used by the organization. Maximum size is 255 characters.
TradeStyle3	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional tradestyle used by the organization. Maximum size is 255 characters.
TradeStyle4	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional tradestyle used by the organization. Maximum size is 255 characters.

Field Name	Details
TradeStyle5	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional tradestyle used by the organization. Maximum size is 255 characters.
URL	**Type** url **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An organization's primary website address. Maximum size is 104 characters.
UsTaxId	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The identification number for the company used by the Internal Revenue Service (IRS) in the administration of tax laws. Also referred to as Federal Taxpayer Identification Number. Maximum size is 9 characters.
WomenOwned	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates whether a company is more than 50 percent owned or controlled by a woman. Available values include: • Y—Owned by a woman • N—Not owned by a woman, or unknown
YearStarted	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The year the company was established or the year when current ownership or management assumed control of the company. Maximum size is 4 characters.

Usage

Use this object to manage D&B Company records in your organization.

Dashboard

Represents a dashboard, which shows data from custom reports as visual components. Access is read-only. This object is available in API version 20.0 and later.

Supported Calls

`describeSObjects()`, `describeLayout()`, `query()`, `retrieve()`, `search()`

Fields

Field	Details
`BackgroundDirection`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Returns the direction of the background fade. Available values are: • `Top to Bottom` • `Left to Right` • `Diagonal` (default value) Label is `Background Fade Direction`.
`BackgroundEnd`	**Type** int **Properties** Filter, Group, Sort **Description** Returns the ending fade color in hexadecimal. Label is `Ending Color`.
`BackgroundStart`	**Type** int **Properties** Filter, Group, Sort **Description** Returns the starting fade color in hexadecimal. Label is `Starting Color`.

Field	Details
Description	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Returns the description of the dashboard. Limit: 255 characters.
DeveloperName	**Type** string **Properties** Filter, Group, Sort **Description** Required. The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is `Dashboard Unique Name`. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
FolderId	**Type** reference **Properties** Filter, Group, Sort **Description** Required. Returns the ID of the Folder that contains the dashboard. See Folder.
FolderName	**Type** string **Properties** Filter, Nillable, Sort **Description** Name of the folder that contains the dashboard. Available in API version 35.0 and later.
IsDeleted	**Type** boolean

Field	Details
	Properties Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is `Deleted`.
`LastReferencedDate`	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
`LastViewedDate`	**Type** datetime **Properties** Filter, Nillable, Sort, **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (`LastReferencedDate`) but not viewed it.
`LeftSize`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Returns the size of the left column of the dashboard. Available values are: • `Narrow` • `Medium` • `Wide`
`MiddleSize`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Returns the size of the middle column of the dashboard. Available values are:

Field	Details
	• `Narrow` • `Medium` • `Wide`
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
`RightSize`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Returns the size of the right column in the dashboard. Available values are: • `Narrow` • `Medium` • `Wide`
`RunningUserId`	**Type** reference **Properties** Filter, Group, Sort **Description** Returns the ID of the running user specified for the dashboard.

Field	Details
	If the dashboard was created in Lightning Experience and is configured to run as the viewing user, returns the user ID of the dashboard creator. If the dashboard was created in Salesforce Classic and is configured to run as the logged-in user, returns the user ID of the last specified running user.
`TextColor`	**Type** int **Properties** Filter, Group, Sort **Description** Returns the body text color in hexadecimal. Label is `Text Color`.
`Title`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** Returns the title of the dashboard. Limit: 80 characters.
`TitleColor`	**Type** int **Properties** Filter, Group, Sort **Description** Returns the title text color in hexadecimal. Label is `Title Color`.
`TitleSize`	**Type** int **Properties** Filter, Group, Sort **Description** Returns the title font size in points. Label is `Title Size`.
`Type`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Returns the dashboard type. Available values are: • `SpecificUser`—The dashboard displays data according to the access level of one specific running user.

Field	Details
	• `LoggedInUser`—The dashboard displays data according to the access level of the logged-in user. • `MyTeamUser`—The dashboard displays data according to the access level of the logged-in user, and managers can view dashboards from the point of view of users beneath them in the role hierarchy.

Supported Query Scopes

Use these scopes to help specify the data that your SOQL query returns.

allPrivate

Records saved in all users' private folders.

Requires the user permission "Manage All Private Reports and Dashboards" and Enhanced Analytics Folder Sharing. If your organziation was created after the Summer '13 release, you already have Enhanced Analytics Folder Sharing. Available in API version 36.0 and later.

created

Records created by the user running the query.

everything

All records except records saved in other users' private folders.

mine

Records saved in the private folder of the user running the query.

Usage

Provides read only access to the current values in the dashboard fields.

Example: Dashboards in an Inactive User's Private Folder

This SOQL query returns dashboards saved in a specific user's private folder.

```
SELECT Id FROM Dashboard USING SCOPE allPrivate WHERE CreatedByID = '005A0000000Bc2deFG'
```

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

DashboardFeed

Feed tracking is available for the object.

SEE ALSO:

DashboardTag

Report

DashboardComponent

Represents a dashboard component, which can be a chart, metric, table, or gauge on a dashboard. Access is read-only. This object is available in API version 21.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`CustomReportId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Requires the user permission "Manage All Private Reports and Dashboards." The ID of the report that provides data for the dashboard component. See Report.
`DashboardId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the dashboard that contains the dashboard component. See Dashboard.
`Name`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the dashboard component.

Usage

Provides read only access to the current values in dashboard component fields.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

DashboardComponentFeed
Feed tracking is available for the object.

DashboardTag

Associates a word or short phrase with a Dashboard. This object is available in API version 20.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ItemId`	**Type** reference **Properties** Create, Filter **Description** ID of the tagged item.
`Name`	**Type** string **Properties** Create, Filter **Description** Name of the tag. If this value does not already exist, a new TagDefinition is created and becomes the parent of this Tag object. Otherwise, a TagDefinition with the same name becomes the parent of this Tag object. Parent relationships are created automatically.
`TagDefinitionId`	**Type** reference **Properties** Filter **Description** ID of the parent TagDefinition object that owns the tag.
`Type`	**Type** picklist **Properties** Create, Filter, Restricted picklist

Field Name	Details
	Description Defines the visibility of a tag. Valid values: • `Public`—The tag can be viewed and manipulated by all users in an organization. • `Personal`—The tag can be viewed or manipulated only by a user with a matching `OwnerId`.

Usage

DashboardTag stores the relationship between its parent TagDefinition and the Dashboard being tagged. Tag objects act as metadata, allowing users to describe and organize their data.

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

SEE ALSO:

Dashboard

DataAssessmentFieldMetric

Represents summary statistics for matched, blank, and differing fields in account records of an org compared to records in Data.com.This object is available in API version 37.0 and later.

Note: When your Data.com Prospector or Data.com Clean contract expires, Data.com features, objects, and fields will be removed from your org.

To support customers' needs around compliance and to remain a leader in trust and privacy, Salesforce removed all contact data from the Data.com service on February 1, 2021.

For more information, see Data.com Prospector and Clean Retirement.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Child Relationships

DataAssessmentFieldMetric is a child object of DataAssessmentMetric object.

Fields

Field Name	Details
`DataAssessmentMetricId`	**Type** reference

Field Name	Details
	Properties Filter, Group, Sort **Description** A unique number that identifies the parent DataAssessmentMetric record.
FieldName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the assessed field.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** An optional field used to name your record.
NumMatchedBlanks	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of matched records that contain blank fields.
NumMatchedDifferent	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of matched records that have a different value for this field.
NumMatchedInSync	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of matched records that have the same value for this field.
NumUnmatchedBlanks	**Type** int

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The number of unmatched records that contain blank fields.

DataAssessmentMetric

Represents a summary of statistics for fields matched and unmatched in your account records with Data.com account records.This object is available in API version 37.0 and later.

Note: When your Data.com Prospector or Data.com Clean contract expires, Data.com features, objects, and fields will be removed from your org.

To support customers' needs around compliance and to remain a leader in trust and privacy, Salesforce removed all contact data from the Data.com service on February 1, 2021.

For more information, see Data.com Prospector and Clean Retirement.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** An optional field used to name your record.
`NumDuplicates`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of duplicate records.
`NumMatched`	**Type** int

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The number of matched records.
`NumMatchedDifferent`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of records in your org matched with a Data.com record that have different fields.
`NumProcessed`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of records processed in the data assessment.
`NumTotal`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of records available for data assessment processing.
`NumUnmatched`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of records not matched.

DataAssessmentValueMetric

Summarizes the number of fields matched for your account records with Data.com account records.This object is available in API version 37.0 and later.

Note: When your Data.com Prospector or Data.com Clean contract expires, Data.com features, objects, and fields will be removed from your org.

To support customers' needs around compliance and to remain a leader in trust and privacy, Salesforce removed all contact data from the Data.com service on February 1, 2021.

For more information, see Data.com Prospector and Clean Retirement.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Child Relationships

DataAssessmentValueMetric is a child of DataAssessementFieldMetric.

Fields

Field Name	Details
`DataAssessmentFieldMetricId`	**Type** reference **Properties** Filter, Group, Sort **Description** A unique number that identifies the parent DataAssessementFieldMetric record.
`FieldValue`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The value in the matched field.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** An optional field used to name your record.
`ValueCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of times this value appears in this field.

DatacloudCompany

Represents the fields for Data.com company records. This object is available in API version 30.0 or later.

Note: When your Data.com Prospector or Data.com Clean contract expires, Data.com features, objects, and fields will be removed from your org.

To support customers' needs around compliance and to remain a leader in trust and privacy, Salesforce removed all contact data from the Data.com service on February 1, 2021.

For more information, see Data.com Prospector and Clean Retirement.

Supported Calls

`describeLayout()`, `describeSObjects()`, `query()`

Fields

Field Name	Details
ActiveContacts	**Type** int **Properties** Nillable **Description** The number of active contacts that are associated with a company.
AnnualRevenue	**Type** currency **Properties** Filter, Nillable **Description** The amount of money that the company makes in 1 year. Annual revenue is measured in US dollars.
City	**Type** string **Properties** Filter, Nillable, Sort **Description** The name of the city where the company is located.
CompanyId	**Type** string

Field Name	Details
	Properties Filter, Nillable **Description** A unique numerical identifier for the company and theData.com identifier for a company.
`Country`	**Type** string **Properties** Filter, Nillable, Sort **Description** A string that represents the standard abbreviation for the country where the company is located.
`CountryCode`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist **Description** A standardized name for countries of the world.
`Description`	**Type** string **Properties** Nillable **Description** A brief synopsis of the company that provides a general overview of the company and what it does.
`DunsNumber`	**Type** string **Properties** Filter, Nillable **Description** A randomly generated nine-digit number that's assigned by Dun & Bradstreet (D&B) to identify unique business establishments.
`EmployeeQuantityGrowthRate`	**Type** double

Field Name	Details
	Properties Nillable **Description** The yearly growth rate of the number of employees in a company expressed as a decimal percentage. The data includes the total employee growth rate for the past two years.
ExternalId	**Type** string **Properties** Filter, Nillable, Sort **Description** A unique numerical identifier for the company. The ExternalId is a system-generated number.
Fax	**Type** phone **Properties** Nillable **Description** The telephone number that's used to send and receive faxes.
FortuneRank	**Type** int **Properties** Defaulted on create, Group, Nillable **Description** The numeric value of the company's Fortune 1000 ranking. A null or blank value means that the company isn't ranked as a Fortune 1000 company.
FullAddress	**Type** string **Properties** Group, Nillable **Description** The complete address of a company, including Street, City, State, and Zip.
IncludedInSnP500	**Type** string **Properties** Group, Nillable

Field Name	Details
	Description A true or false value. If `true`, the company is listed in the S&P 500 Index. If `false`, the company isn't listed in the S&P 500 Index.
`Industry`	**Type** string **Properties** Nillable **Description** A description of the type of industry such as Telecommunications, Agriculture, or Electronics.
`IsInCrm`	**Type** boolean **Properties** Defaulted on create, Group **Description** Whether the record is in Salesforce (true) or not (false).
`IsInactive`	**Type** boolean **Properties** Defaulted on create, Filter **Description** A true or false response. True, the company record is not active. False, the company record is active.
`IsOwned`	**Type** boolean **Properties** Defaulted on create **Description** A true or false value. True, your organization owns the record. False, your organization doesn't own the record.
`NaicsCode`	**Type** string **Properties** Filter, Nillable

Field Name	Details
	Description A value that represents the North American Industry Classification System (NAICS) code. NAICS was created to provide details about a business's service orientation. The code descriptions are focused on what a business does.
`NaicsDesc`	**Type** string **Properties** Nillable **Description** A description of the NAICS classification.
`Name`	**Type** string **Properties** Filter, Nillable, Sort **Description** The company's name.
`NumberOfEmployees`	**Type** int **Properties** Filter, Nillable **Description** The number of employees working for the company.
`Ownership`	**Type** string **Properties** Filter, Nillable **Description** The type of ownership of the company: • `Public` • `Private` • `Government` • `Other`
`Phone`	**Type** phone

Field Name	Details
	Properties Nillable **Description** A numeric string containing the primary telephone number for the company.
PremisesMeasure	**Type** int **Properties** Group, Nillable **Description** A numeric value for the measurement of the premises.
PremisesMeasureReliability	**Type** string **Properties** Group, Nillable **Description** A descriptive accuracy of the measurement such as actual, estimated, or modeled.
PremisesMeasureUnit	**Type** string **Properties** Group, Nillable **Description** A descriptive measurement unit such as acres, square meters, or square feet.
PriorYearEmployees	**Type** int **Properties** Group, Nillable **Description** The total number of employees for the prior year.
PriorYearRevenue	**Type** double **Properties** Nillable **Description** The annual revenue for the prior year.

Field Name	Details
SalesTurnoverGrowthRate	**Type** double **Properties** Nillable **Description** The increase in annual revenue from the previous value for an equivalent period expressed as a decimal percentage.
Sic	**Type** string **Properties** Filter, Nillable **Description** A numeric value that represents the Standard Industrial Codes (SIC). SIC is a numbering convention that indicates what type of service a business provides. It is a four-digit value.
SicCodeDesc	**Type** string **Properties** Group, Nillable **Description** The SIC numeric code and descsciption for a company.
SicDesc	**Type** string **Properties** Nillable **Description** A description of the SIC classification.
Site	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist **Description** An organizational status of the company. • Branch: a secondary location to a headquarter location • Headquarter: a parent company with branches or subsidiaries • Single Location: a single business with no subsidiaries or branches

Field Name	Details
State	**Type** string **Properties** Filter, Nillable, Sort **Description** The two-letter standard abbreviation for a state.
StateCode	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist **Description** A standard two-letter abbreviation for states and territories of the United States. The state where the company is located. The abbreviation can also be a province or other equivalent to a state, depending on the country where the company is located.
Street	**Type** string **Properties** Nillable **Description** A postal address for the company.
TickerSymbol	**Type** string **Properties** Nillable **Description** The symbol that uniquely identifies companies that are traded on public stock exchanges.
TradeStyle	**Type** string **Properties** Nillable **Description** A legal name under which a company conducts business.

Field Name	Details
UpdatedDate	**Type** dateTime **Properties** Nillable, Sort **Description** The last date and time when the information for this company was updated.
Website	**Type** url **Properties** Nillable **Description** The standard URL for the company's home page.
YearStarted	**Type** string **Properties** Nillable **Description** The year when the company was founded.
Zip	**Type** string **Properties** Filter, Nillable **Description** A numeric postal code that's designated for the address.

Usage

Use the DatacloudCompany object to search the Data.com database for companies with the specific criteria that you enter. Use this object to find company records that you are interested in purchasing for your organization. Data.com APIs use the term "company," which is similar to Salesforce term "accounts."

Important: DatacloudCompany can't be used in Apex test methods, because an external web service call is required to access it. These calls are not allowed in Apex test methods.

DatacloudContact

The fields and properties for Data.com contact records. This object is available in API version 30.0 or later.

Note: When your Data.com Prospector or Data.com Clean contract expires, Data.com features, objects, and fields will be removed from your org.

To support customers' needs around compliance and to remain a leader in trust and privacy, Salesforce removed all contact data from the Data.com service on February 1, 2021.

For more information, see Data.com Prospector and Clean Retirement.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field Name	Details
`City`	**Type** string **Properties** Filter, Nillable, Sort **Description** The city where the company is located.
`CompanyId`	**Type** string **Properties** Filter, Nillable **Description** The unique numerical identifier for the company and the Data.com company identification number or Data.com Key.
`CompanyName`	**Type** string **Properties** Filter, Group, Sort **Description** The name of the company.
`ContactId`	**Type** string **Properties** Filter, Nillable **Description** The unique numeric identifier for this contact.

Field Name	Details
Country	**Type** string **Properties** Filter, Nillable, Sort **Description** The standard abbreviation or name for the country where the company is located. Note: You can enter a comma-separated list of countries; however, for a country that uses a comma in its name, leave out the comma. For example, enter "Taiwan, ROC" as `Taiwan ROC`.
Department	**Type** picklist **Properties** Filter, Group, Restricted picklist **Description** The department in the company that the contact is affiliated with. The values of this field are fixed enumerated values. • `Engineering` • `Finance` • `Human Resources` • `IT` • `Marketing` • `Operations` • `Other` • `Sales` • `Support`
Email	**Type** email **Properties** Filter, Nillable **Description** A business email address for the contact.
ExternalId	**Type** string **Properties** Filter, Nillable, Sort

Field Name	Details
	Description A unique system-generated numerical identifier for the contact.
FirstName	**Type** string **Properties** Filter, Nillable **Description** The first name of the contact.
IsInCrm	**Type** boolean **Properties** Defaulted on create, Group **Description** Whether the record is in Salesforce (true) or not (false).
IsInactive	**Type** boolean **Properties** Defaulted on create, Filter **Description** Whether the record is active (false) or not (true).
IsOwned	**Type** boolean **Properties** Defaulted on create **Description** • `True`: You own this record. • `False`: You do not own this record.
LastName	**Type** string **Properties** Filter, Nillable, Sort **Description** The last name of the contact.

Field Name	Details
`Level`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist **Description** A human resource label that designates a person’s level in the company. The values of this field are fixed enumerated values. • `C-Level` • `VP` • `Director` • `Manager` • `Staff` • `Other`
`Phone`	**Type** phone **Properties** Nillable **Description** The direct-dial telephone number for the contact.
`SocialHandles`	**Type** string **Description** The social handles for this contact. Social handles are a normalized URL and user name for social media accounts such as, LinkedIn, Facebook, and Twitter. This field is response-only. The DatacloudSocialHandles object is a child of the DatacloudContact object.
`State`	**Type** string **Properties** Filter, Nillable, Sort **Description** The state where the company is located, which can also be a province or other equivalent to a state, depending on the country where the company is located.
`Street`	**Type** string

Field Name	Details
	Properties Nillable **Description** The street address for the company where the contact works.
`Title`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Title of the contact such as CEO or Vice President.
`UpdatedDate`	**Type** dateTime **Properties** Nillable, Sort **Description** The last date and time when the information for a contact was updated.
`Zip`	**Type** string **Properties** Filter, Nillable **Description** The postal or zip code for the address.

Usage

This object searches the Data.com database for contacts with the specific criteria that you enter. Use this object to find contact records that you are interested in purchasing for your organization.

Important: DatacloudContact can't be used in Apex test methods, because an external web service call is required to access it. These calls are not allowed in Apex test methods.

DatacloudDandBCompany

Represents a set of read-only fields that are used to return D&B company data from Data.com API calls. This object is available in API version 30.0 or later.

> **Note:** When your Data.com Prospector or Data.com Clean contract expires, Data.com features, objects, and fields will be removed from your org.
>
> To support customers' needs around compliance and to remain a leader in trust and privacy, Salesforce removed all contact data from the Data.com service on February 1, 2021.
>
> For more information, see Data.com Prospector and Clean Retirement.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field Name	Details
`City`	**Type** string **Properties** Nillable **Description** The name of the city where the company is physically located.
`CompanyCurrencyIsoCode`	**Type** picklist **Properties** Nillable, Restricted picklist **Description** The code used to represent a company's local currency. This data is provided by the International Organization for Standardization (ISO) and is based on their three-letter currency codes. For example, USD is the ISO code for United States Dollar.
`CompanyId`	**Type** string **Properties** Filter, Nillable, Sort **Description** A unique numeric identifier for a company.
`Country`	**Type** string **Properties** Nillable

Field Name	Details
	Description The country where a company is physically located.
CountryAccessCode	**Type** string **Properties** Nillable **Description** The required code for international calls.
CurrencyCode	**Type** picklist **Properties** Nillable, Restricted picklist **Description** The currency in which the company's sales volume is expressed.
Description	**Type** string **Properties** Nillable **Description** A brief description of the company, which may include information about its history, its products and services, and its influence on a particular industry.
DomesticUltimateBusinessName	**Type** string **Properties** Nillable **Description** The primary name of the Domestic Ultimate, which is the highest ranking subsidiary, specified by country, within an organization's corporate structure.
DomesticUltimateDunsNumber	**Type** string **Properties** Nillable **Description** The D-U-N-S number for the Domestic Ultimate, which is the highest-ranking subsidiary, specified by country, within an organization's corporate structure.

Field Name	Details
DunsNumber	**Type** string **Properties** Filter, Nillable **Description** The Data Universal Numbering System (D-U-N-S) number is a unique, nine-digit number assigned to every business location in the Dun & Bradstreet database that has a unique, separate, and distinct operation. D-U-N-S numbers are used by industries and organizations around the world as a global standard for business identification and tracking.
EmployeeQuantityGrowthRate	**Type** double **Properties** Nillable **Description** The yearly growth rate of the number of employees in a company expressed as a decimal percentage. The data includes the total employee growth rate for the past two years.
EmployeesHere	**Type** double **Properties** Nillable **Description** The number of employees at a specified location, such as a branch location.
EmployeesHereReliability	**Type** picklist **Properties** Nillable, Restricted picklist **Description** The reliability of the `EmployeesHere` figure. Available values are *Actual number*, *Low*, *Estimated (for all records)*, *Modeled (for non-US records)*. A blank value indicates this data is unavailable.
EmployeesTotal	**Type** double **Properties** Nillable

Field Name	Details
	Description The total number of employees in the company, including all subsidiary and branch locations. This data is available only on records that have a value of *`Headquarters/Parent`* in the `LocationStatus` field.
`EmployeesTotalReliability`	**Type** picklist **Properties** Nillable, Restricted picklist **Description** The reliability of the `EmployeesTotal` figure. Available values are *`Actual number`*, *`Low`*, *`Estimated (for all records)`*, *`Modeled (for non-US records)`*. A blank value indicates this data is unavailable.
`ExternalId`	**Type** string **Properties** Filter, Nillable, Sort **Description** A system generated numeric identification.
`FamilyMembers`	**Type** int **Properties** Nillable **Description** The total number of family members, worldwide, within an organization, including the Global Ultimate, its subsidiaries (if any), and its branches (if any).
`Fax`	**Type** phone **Properties** Nillable **Description** The company's facsimile number.
`FifthNaics`	**Type** string **Properties** Nillable

Field Name	Details
	Description A NAICS code that's used to further classify an organization by industry.
FifthNaicsDesc	**Type** string **Properties** Nillable **Description** A brief description of an organization's line of business, based on the corresponding NAICS code.
FifthSic	**Type** string **Properties** Nillable **Description** A Standard Industrial Classification (SIC) code that's used to further classify an organization by industry.
FifthSic8	**Type** string **Properties** Group, Nillable **Description** An additional SIC code used to further classify an organization by industry. Maximum size is 8 characters.
FifthSic8Desc	**Type** string **Properties** Group, Nillable **Description** A brief description of an organization's line of business, based on the corresponding SIC code. Maximum size is 80 characters.
FifthSicDesc	**Type** string **Properties** Nillable

Field Name	Details
	Description A brief description of an organization's line of business, based on the corresponding SIC code.
FipsMsaCode	**Type** string **Properties** Nillable **Description** The Federal Information Processing Standards (FIPS) and the Metropolitan Statistical Area (MSA) codes identify the organization's location. The MSA codes are defined by the US Office of Management and Budget.
FipsMsaDesc	**Type** string **Properties** Nillable **Description** A brief description of an organization's FIPS MSA code.
FortuneRank	**Type** int **Properties** Defaulted on create, Group, Nillable **Description** The numeric value of the company's Fortune 1000 ranking. A null or blank value means that the company isn't ranked as a Fortune 1000 company.
FourthNaics	**Type** string **Properties** Nillable **Description** A NAICS code used to further classify an organization by industry.
FourthNaicsDesc	**Type** string **Properties** Nillable

Field Name	Details
	Description A brief description of an organization's line of business, based on the corresponding NAICS code.
FourthSic	**Type** string **Properties** Group, Nillable **Description** A SIC code used to further classify an organization by industry.
FourthSic8	**Type** string **Properties** Group, Nillable **Description** An additional SIC code used to further classify an organization by industry. Maximum size is 8 characters.
FourthSic8Desc	**Type** string **Properties** Group, Nillable **Description** A brief description of an organization's line of business, based on the corresponding SIC code. Maximum size is 80 characters.
FourthSicDesc	**Type** string **Properties** Nillable **Description** A brief description of an organization's line of business, based on the corresponding SIC code.
GeoCodeAccuracy	**Type** picklist **Properties** Nillable, Restricted picklist

Field Name	Details
	Description The level of accuracy of a location’s geographical coordinates compared with its physical address. Available values include *Rooftop level*, *Street level*, *Block level*, *Census tract level*, *Mailing address level*, *ZIP code level*, *Geocode could not be assigned*, *Places the address in the correct city*, *Not matched*, *State or Province Centroid*, *Street intersection*, *PO BOX location*, *Non-US rooftop accuracy*, *County Centroid*, *Sub Locality-Street Level*, and *Locality Centroid*
GlobalUltimateBusinessName	**Type** string **Properties** Nillable **Description** The primary name of the Global Ultimate, which is the highest entity within an organization’s corporate structure and may oversee branches and subsidiaries.
GlobalUltimateDunsNumber	**Type** string **Properties** Filter, Nillable **Description** The D-U-N-S number of the Global Ultimate, which is the highest-ranking entity within an organization’s corporate structure and can oversee branches and subsidiaries.
GlobalUltimateTotalEmployees	**Type** double **Properties** Nillable **Description** The total number of employees at the Global Ultimate, which is the highest entity within an organization’s corporate structure and may oversee branches and subsidiaries.
ImportExportAgent	**Type** picklist **Properties** Nillable, Restricted picklist

Field Name	Details
	Description Identifies whether a business imports goods or services, exports goods or services, and/or is an agent for goods.
`IncludedInSnP500`	**Type** string **Properties** Group, Nillable **Description** A true or false value. If `true`, the company is listed in the S&P 500 Index. If `false`, the company isn't listed in the S&P 500 Index.
`Industry`	**Type** string **Properties** Group, Nillable **Description** A description of the type of industry such as Telecommunications, Agriculture, or Electronics.
`IsOwned`	**Type** boolean **Properties** Defaulted on create **Description** A true or false value. True, your organization owns the record. False, your organization doesn't own the record.
`IsParent`	**Type** boolean **Properties** Defaulted on create, **Description** A true or false value. True, the company is a parent company. False, the company isn't a parent company. A parent company owns other companies.
`Latitude`	**Type** string **Properties** Nillable

Field Name	Details
	Description Used with longitude to specify a precise location, which is used to assess the Geocode Accuracy.
`LegalStatus`	**Type** picklist **Properties** Nillable, Restricted picklist **Description** Identifies the legal structure of an organization. Available values include *`Cooperative`*, *`Nonprofit organization`*, *`Local government body`*, *`Partnership of unknown type`*, and *`Foreign company`*.
`LocationStatus`	**Type** picklist **Properties** Filter, Nillable, Restricted picklist **Description** Identifies the organizational status of a company. A numeric value represents each value. <table><tr><th>Organizational status</th><th>Numeric value</th></tr><tr><td><code>Single location</code>: The business has no branches or subsidiaries.</td><td><code>0</code></td></tr><tr><td><code>Headquarters/Parent</code>: A parent company that owns more than 50 percent of another company. When the company also has branches, it’s the headquarters.</td><td><code>1</code></td></tr><tr><td><code>Branch</code>: A secondary location of a business.</td><td><code>2</code></td></tr></table> Note: Only the numeric value is accepted in an API request.
`Longitude`	**Type** string **Properties** Nillable

Field Name	Details
	Description Used with latitude to specify a precise location, which is used to assess the Geocode Accuracy.
`MailingCity`	**Type** string **Properties** Nillable **Description** The city where a company has its mail delivered.
`MailingCountry`	**Type** string **Properties** Nillable **Description** The country where a company has its mail delivered.
`MailingState`	**Type** string **Properties** Nillable **Description** The state where a company has its mail delivered.
`MailingStreet`	**Type** string **Properties** Nillable **Description** The street address where a company has its mail delivered.
`MailingZip`	**Type** string **Properties** Nillable **Description** The postal zip code for the company.

Field Name	Details
MarketingPreScreen	**Type** picklist **Properties** Nillable, Restricted picklist **Description** The probability that a company pays with a significant delay compared to the agreed terms. The risk level is based on the standard Commercial Credit Score, and ranges from low risk to high risk. Available values are *High risk of delinquency*, *Low risk of delinquency*, and *Moderate risk of delinquency*. **Important:** Use this information for marketing pre-screening purposes only.
MarketingSegmentationCluster	**Type** picklist **Properties** Nillable, Restricted picklist **Description** Twenty-two distinct, mutually exclusive profiles, created as a result of cluster analysis of Dun & Bradstreet data for US organizations. Available values include *High-Tension Branches of Insurance/Utility Industries*, *Rapid-Growth Large Businesses*, *Labor-Intensive Giants*, *Spartans*, *Main Street USA*.
MinorityOwned	**Type** picklist **Properties** Nillable, Restricted picklist **Description** Indicates whether an organization is owned or controlled by a member of a minority group.
Name	**Type** string **Properties** Filter, Nillable **Description** The primary or registered name of a company.
NationalId	**Type** string

Field Name	Details
	Properties Nillable **Description** The identification number used in some countries for business registration and tax collection.
NationalIdType	**Type** picklist **Properties** Nillable, Restricted picklist **Description** A code value that identifies the type of national identification number that's used.
OutOfBusiness	**Type** picklist **Properties** Nillable, Restricted picklist **Description** Indicates whether the company at the specified address has discontinued operations.
OwnOrRent	**Type** picklist **Properties** Nillable, Restricted picklist **Description** Indicates whether a company owns or rents the building it occupies.
ParentOrHqBusinessName	**Type** string **Properties** Nillable **Description** The primary name of the parent or headquarters company.
ParentOrHqDunsNumber	**Type** string **Properties** Filter, Nillable

Field Name	Details
	Description The D-U-N-S number for the parent or headquarters.
Phone	**Type** phone **Properties** Nillable **Description** A company's primary telephone number.
PremisesMeasure	**Type** int **Properties** Group, Nillable **Description** A numeric value for the measurement of the premises.
PremisesMeasureReliability	**Type** string **Properties** Group, Nillable **Description** A descriptive accuracy of the measurement such as actual, estimated, or modeled.
PremisesMeasureUnit	**Type** string **Properties** Group, Nillable **Description** A descriptive measurement unit such as acres, square meters, or square feet.
PrimaryNaics	**Type** string **Properties** Nillable **Description** The six-digit North American Industry Classification System (NAICS) code is the standard used by business and government to classify business establishments according to their economic activity for the purpose of collecting, analyzing, and publishing statistical data related to the US business economy.

Field Name	Details
PrimaryNaicsDesc	**Type** string **Properties** Nillable **Description** A brief description of an organization's line of business, based on its NAICS code.
PrimarySic	**Type** string **Properties** Nillable **Description** The four-digit SIC code that's used to categorize business establishments by industry.
PrimarySic8	**Type** string **Properties** Group, Nillable **Description** The eight-digit Standard Industrial Classification (SIC) code is used to categorize business establishments by industry. The full list of values can be found at the Optimizer Resources page maintained by Dun & Bradstreet. Maximum size is 8 characters.
PrimarySic8Desc	**Type** string **Properties** Group, Nillable **Description** A brief description of an organization's line of business, based on the corresponding SIC code. Maximum size is 80 characters.
PrimarySicDesc	**Type** string **Properties** Nillable **Description** A brief description of an organization's line of business, based on its SIC code.

Field Name	Details
PriorYearEmployees	**Type** int **Properties** Group, Nillable **Description** The total number of employees for the prior year.
PriorYearRevenue	**Type** double **Properties** Nillable **Description** The annual revenue for the prior year.
PublicIndicator	**Type** picklist **Properties** Nillable, Restricted picklist **Description** Indicates whether ownership of the company is public or private.
Revenue	**Type** double **Properties** Nillable **Description** The annual revenue of a company in US dollars.
SalesTurnoverGrowthRate	**Type** double **Properties** Nillable **Description** The increase in annual revenue from the previous value for an equivalent period expressed as a decimal percentage.
SalesVolume	**Type** double **Properties** Nillable

Field Name	Details
	Description The total annual sales revenue in the headquarters' local currency. Dun & Bradstreet tracks revenue data for publicly traded companies, Global Ultimates, Domestic Ultimates, and some headquarters.
SalesVolumeReliability	**Type** picklist **Properties** Nillable, Restricted picklist **Description** The reliability of the SalesVolume figure.
SecondNaics	**Type** string **Properties** Nillable **Description** A NAICS code used to further classify an organization by industry.
SecondNaicsDesc	**Type** string **Properties** Nillable **Description** A brief description of an organization's line of business, based on the corresponding NAICS code.
SecondSic	**Type** string **Properties** Nillable **Description** A SIC code used to further classify an organization by industry.
SecondSic8	**Type** string **Properties** Group, Nillable

Field Name	Details
	Description An additional SIC code used to further classify an organization by industry. Maximum size is 8 characters.
SecondSic8Desc	**Type** string **Properties** Group, Nillable **Description** A brief description of an organization's line of business, based on the corresponding SIC code. Maximum size is 80 characters.
SecondSicDesc	**Type** string **Properties** Nillable **Description** A brief description of an organization's line of business, based on the corresponding SIC code.
SixthNaics	**Type** string **Properties** Nillable **Description** A NAICS code used to further classify an organization by industry.
SixthNaicsDesc	**Type** string **Properties** Nillable **Description** A brief description of an organization's line of business, based on the corresponding SIC code.
SixthSic	**Type** string **Properties** Nillable **Description** A SIC code used to further classify an organization by industry.

Field Name	Details
SixthSic8	**Type** string **Properties** Group, Nillable **Description** An additional SIC code used to further classify an organization by industry. Maximum size is 8 characters.
SixthSic8Desc	**Type** string **Properties** Group, Nillable **Description** A brief description of an organization’s line of business, based on the corresponding SIC code. Maximum size is 80 characters.
SixthSicDesc	**Type** string **Properties** Nillable **Description** A brief description of an organization’s line of business, based on the corresponding SIC code.
SmallBusiness	**Type** picklist **Properties** Nillable, Restricted picklist **Description** Indicates whether the company is designated a small business as defined by the Small Business Administration of the US government.
State	**Type** string **Properties** Nillable **Description** The state where a company is physically located.
StockExchange	**Type** string

Field Name	Details
	Properties Nillable **Description** The corresponding exchange for a company's stock symbol, for example, NASDAQ or NYSE.
StockSymbol	**Type** string **Properties** Nillable **Description** The abbreviation that's used to identify publicly traded shares of a particular stock.
Street	**Type** string **Properties** Nillable **Description** The street address where a company is physically located.
Subsidiary	**Type** picklist **Properties** Nillable, Restricted picklist **Description** Indicates whether a company is more than 50 percent owned by another organization.
ThirdNaics	**Type** string **Properties** Nillable **Description** A NAICS code used to further classify an organization by industry.
ThirdNaicsDesc	**Type** string **Properties** Nillable

Field Name	Details
	Description A brief description of an organization's line of business, based on the corresponding NAICS code.
`ThirdSic`	**Type** string **Properties** Nillable **Description** A SIC code used to further classify an organization by industry.
`ThirdSic8`	**Type** string **Properties** Group, Nillable **Description** An additional SIC code used to further classify an organization by industry. Maximum size is 8 characters.
`ThirdSic8Desc`	**Type** string **Properties** Group, Nillable **Description** A brief description of an organization's line of business, based on the corresponding SIC code. Maximum size is 80 characters.
`ThirdSicDesc`	**Type** string **Properties** Nillable **Description** A brief description of an organization's line of business, based on the corresponding SIC code.
`TradeStyle1`	**Type** string **Properties** Nillable

Field Name	Details
	Description A name, different from its legal name, that an organization may use for conducting business. Similar to “Doing business as” or “DBA”.
TradeStyle2	**Type** string **Properties** Nillable **Description** A tradestyle used by the organization.
TradeStyle3	**Type** string **Properties** Nillable **Description** A tradestyle used by the organization.
TradeStyle4	**Type** string **Properties** Nillable **Description** A tradestyle used by the organization.
TradeStyle5	**Type** string **Properties** Nillable **Description** A tradestyle used by the organization.
UsTaxId	**Type** string **Properties** Nillable **Description** The identification number for the company used by the Internal Revenue Service (IRS) in the administration of tax laws. Also referred to as Federal Taxpayer Identification Number.

Field Name	Details
`Website`	**Type** url **Properties** Filter, Group, Nillable **Description** An organization's primary website address.
`WomenOwned`	**Type** picklist **Properties** Nillable, Restricted picklist **Description** Indicates whether a company is more than 50 percent owned or controlled by a woman.
`YearStarted`	**Type** string **Properties** Nillable **Description** The year when the company was established or the year when current ownership or management assumed control of the company.
`Zip`	**Type** string **Properties** Nillable **Description** A five or nine-digit code that's used to help sort mail.

Usage

Use this object to return D&B Company information. These fields are read-only.

Important: DatacloudDandBCompany can't be used in Apex test methods, because an external web service call is required to access it. These calls are not allowed in Apex test methods.

DatacloudOwnedEntity

Represents fields in the DatacloudOwnedEntity object. The DatacloudOwnedEntity object tracks user-purchased records. This object is available in API version 30.0 or later.

Note: When your Data.com Prospector or Data.com Clean contract expires, Data.com features, objects, and fields will be removed from your org.

To support customers' needs around compliance and to remain a leader in trust and privacy, Salesforce removed all contact data from the Data.com service on February 1, 2021.

For more information, see Data.com Prospector and Clean Retirement.

Supported Calls

`create()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`DataDotComKey`	**Type** string **Properties** Create, Filter, Sort **Description** The Data.com contact or company record identification number used by the DatacloudPurchaseUsage object to keep track of purchased records. This is equivalent to the Data.com record ID for a contact or company.
`DatacloudEntityType`	**Type** picklist **Properties** Create, Filter, Restricted picklist, Sort **Description** The type of Data.com record you want to purchase. • 0—contact • 1—company
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort

Field Name	Details
	Description An optional field used to name your record.
`PurchaseType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** A read only field set by the API to identify the purchase type. • Added • Export • API
`PurchaseUsageId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The unique identification number for the DatacloudPurchaseUsage object created by making a REST POST request. • 0—contact • 1—company
`UserId`	**Type** reference **Properties** Filter, Group, Sort **Description** A unique identifier for the user making the purchase.

Usage

The Datacloud object that tracks records that are purchased and owned by a specific user.

DatacloudPurchaseUsage

Represents an object used to identify and track Data.com record purchases. This object is available in API version 30.0 or later.

Note: When your Data.com Prospector or Data.com Clean contract expires, Data.com features, objects, and fields will be removed from your org.

To support customers' needs around compliance and to remain a leader in trust and privacy, Salesforce removed all contact data from the Data.com service on February 1, 2021.

For more information, see Data.com Prospector and Clean Retirement.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`DatacloudEntityType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of Data.com record you want to purchase. • 0—indicates contact entity type. • 1—indicates company entity type.
`Description`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An optional field. You can add a description for your purchase.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** An optional field used to name your record.
`PurchaseType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort

Field Name	Details
	Description A read only field set by the API to identify the purchase type. • Added • Export • API
`Usage`	**Type** double **Properties** Filter, Sort **Description** A read only field set by the API. It is used to track the points used to purchase records.
`UserId`	**Type** reference **Properties** Filter, Group, Sort **Description** A read only field set by the API that identifies the user purchasing the records.
`UserType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A read only field set by the API with 2 user types. • Monthly Usage • List Pool User

Usage

The DatacloudPurchaseUsage object allows you to track Data.com record purchases for CRM users.

DataIntegrationRecordPurchasePermission

Indicates Lightning Data purchase credits that a Salesforce admin has granted to users.

This object is available in API versions 42.0 and later.

Supported Calls

`describeSObjects()`, `create()`, `delete()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Spring '20 and later, only your Salesforce org's internal users can access this object.

Fields

Field Name	Details
`ExternalObject`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates the name of the data service record matched to the Salesforce record.
`UserId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Indicates the ID of a user to whom purchase credits are assigned.
`UserRecordPurchaseLimit`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Represents the number of purchase credits assigned to a user.

DatasetExport

Represents a dataset exported from Einstein Analytics. When a dataset is exported, the data is converted into a .csv file and the schema is stored in a separate JSON file. These files are stored in two objects: DatasetExport and DatasetExportPart. DatasetExport acts as the header and includes the JSON schema.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`CompressedMetadataLength`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** This field is required when a record in an object contains a BLOB (binary large object) field. In the DataExport object, Metadata is the BLOB field.
`Metadata`	**Type** base64 **Properties** Nillable **Description** Contains the JSON schema that describes the data in the CSV. This schema includes column metadata such as type, format, and defaultValue.
`MetadataLength`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** This field is required when a record in an object contains a BLOB (binary large object) field. In the DataExport object, Metadata is the BLOB field.
`Owner`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** User ID of the owner, as specified in the `userId` parameter in the export node of the dataflow that created the record. Only the specified owner can read the content of the record.
`PublisherInfo`	**Type** string **Properties** Filter, idLookup, Sort **Description** Identifies the export record to facilitate searching when a user has multiple export records. By default, this column is set to the ID of the dataflow that generated the export record,

Field	Details
	concatenated with the name of the specific export node. PublisherInfo is unique within your organization. Note: A dataflow can have multiple export nodes.
`PublisherType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Target of the export, as specified in the `target` parameter in the export node of the dataflow that created the record. The value must be *`EinsteinDiscovery`*.
`Status`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Status of the export. The possible values are: • New • InProgress • Completed • Canceled • Failed Note: The content of the Metadata field can be downloaded when the status is Completed.

Usage

This object is used with the DatasetExportPart object for exporting data from a dataset in Einstein Analytics for use in Einstein Discovery. An export is initiated using the export node in an Analytics dataflow.

SEE ALSO:

DatasetExportPart

DatasetExportPart

Represents a dataset exported from Einstein Analytics. When a dataset is exported, the data is converted into a .csv file and the schema is stored in a separate JSON file. These files are stored in two objects: DatasetExport and DatasetExportPart. DatasetExportPart contains parts of the .csv file.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`CompressedDataFileLength`	**Type** int **Properties** Filter, Group, Sort **Description** This field is required when a record in an object contains a BLOB (binary large object) field. In the DataExportPart object, DataFile is the BLOB field.
`DataFile`	**Type** base64 **Description** Contains a part of the dataset data from the generated .csv file. Maximum size is 32 MB.
`DataFileLength`	**Type** int **Properties** Filter, Group, Sort **Description** This field is required when a record in an object contains a BLOB (binary large object) field. In the DataExportPart object, DataFile is the BLOB field.
`DatasetExportId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the parent record that the part record is associated with.
`Owner`	**Type** string **Properties** Filter, Group, Sort **Description** User ID of the owner, as specified in the `userId` parameter in the export node of the dataflow that created the record. Only the specified owner can read the content of the record.

Field	Details
`PartNumber`	**Type** int **Properties** Filter, Group, Sort **Description** Used with the DatasetExportId to uniquely identify the data part. Parts are assembled sequentially based on their numbers.

Usage

This object is used with the DatasetExport object for exporting data from a dataset in Einstein Analytics for use in Einstein Discovery. An export is initiated using the export node in an Analytics dataflow.

SEE ALSO:
DatasetExport

DataUseLegalBasis

Represents the legal basis for contacting a customer, such as billing or contract. This object is available in API version 45.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is available if Data Protection and Privacy is enabled.

Fields

Field Name	Details
`Description`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of the data use legal basis.

Field Name	Details
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, it's possible that this record was referenced (LastReferencedDate) and not viewed.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Specifies a name for the legal basis. For example, "billing" or "contract".
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the owner of the account associated with this customer.
Source	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates the source of the legal basis. For example, the URL of a contract.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

DataUseLegalBasisHistory
History is available for tracked fields of the object.

DataUseLegalBasisOwnerSharingRule
Sharing rules are available for the object.

DataUseLegalBasisShare
Sharing is available for the object.

DataUsePurpose

Represents the reason for contacting a prospect or customer, such as for billing, marketing, or surveys. This object is available in API version 45.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is available if Data Protection and Privacy is enabled.

Fields

Field Name	Details
`CanDataSubjectOptOut`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Required. Indicates whether the customer can decline contact for the described purpose.
`Description`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates the purpose for contacting a customer.
`LastReferencedDate`	**Type** dateTime

Field Name	Details
	Properties Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, it's possible that this record was referenced (`LastReferencedDate`) and not viewed.
`LegalBasisId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Identifies the legal basis record associated with the data use purpose.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. Identifies the reason for contacting a customer. For example, billing or marketing.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the owner of the account associated with this customer.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

DataUsePurposeHistory
History is available for tracked fields of the object.

DataUsePurposeOwnerSharingRule
Sharing rules are available for the object.

DataUsePurposeShare
Sharing is available for the object.

DatedConversionRate

Represents the dated exchange rates used by an organization for which the multicurrency and the effective dated currency features are enabled.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`,

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`ConversionRate`	**Type** double **Properties** Filter, Update **Description** Required. Conversion rate of this currency type against the corporate currency.
`IsoCode`	**Type** picklist **Properties** Filter, Restricted picklist **Description** Required. ISO code of the currency. Must be one of the valid alphabetic, three-letter currency ISO codes defined by the ISO 4217 standard, such as `USD`, `GBP`, or `JPY`. Must be unique within your organization. Label is **Currency ISO Code**.
`NextStartDate`	**Type** date

Field	Details
	Properties Filter, Nillable **Description** Read only. The date on which the next effective dated exchange rate will start. Effectively the day after the end date for this exchange rate.
StartDate	**Type** date **Properties** Filter **Description** The date on which the effective dated exchange rate starts.

Usage

This object is for multicurrency organizations with advanced currency management enabled. Use this object to define the exchange rates your organization uses for a date range. This object is not available in single-currency organizations, nor is it available if the organization does not have advanced currency management enabled.

DeclinedEventRelation

Represents event participants (invitees or attendees) with the status `Declined` for a given event. This object is available in API versions 29.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
EventId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the event.
RelationId	**Type** reference

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** Indicates the ID of the invitee.
`RespondedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates the most recent date and time when the invitee declined an invitation to the event.
`Response`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Indicates the content of the response field. Label is `Comment`.
`Type`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Indicates whether the invitee is a user, lead or contact, or resource.

Usage

Query invitees who have declined an invitation to an event

```
SELECT eventId, type, response FROM DeclinedEventRelation WHERE eventid='00UTD000000ZH5LA'
```

SEE ALSO:

AcceptedEventRelation

UndecidedEventRelation

DelegatedAccount

Represents the external managed account. This object is available in API version 49.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

You must have a Partner or Customer Community Plus license.

Fields

Field	Details
`AccessBuyFor`	**Type** boolean **Properties** Create, Filter, Update **Description** The access that an admin authorizes for an external user to buy for other accounts. This field is available in API version 50.0 and later. A B2B Commerce license is required to use AccessBuyFor.
`AccessManageUsers`	**Type** boolean **Properties** Create, Filter, Update **Description** The access that an admin authorizes for an external user to manage external users on other accounts. This includes managing permission sets, membership, passwords, and activation. This field is available in API version 50.0 and later. Delegated External User Administrator permission is required to use AccessManageUsers.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort

Field	Details
	Description The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`ManagedById`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the managing user.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Name of the external managed account.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the record owner.
`ParentId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the managing users account. This field is available in API version 50.0 and later.
`TargetId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the account being managed.

DeleteEvent

Represents a record that has been soft deleted. Search on this object was available in API version 48.0, then removed in API version 50.0.

DeleteEvent is a read-only object. You can't create, update, or delete it directly. To create a DeleteEvent record, soft delete a record of another type, like an Account. To remove a DeleteEvent record, use the emptyRecycleBin() API or hard delete the corresponding `Record`.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`DeletedById`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the user who deleted the record.
`DeletedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time when the record was deleted.
`Record`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ID of the record that was deleted.
`RecordName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the record that was deleted.

Field	Details
SobjectName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The type of record that was deleted, for example, Account.

DigitalSignature

Represents a signature captured on a service report in field service.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
DigitalSignatureNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** An auto-generated number identifying the signature.
DocumentBody	**Type** base64 **Properties** Create **Description** The captured signature image.
DocumentContentType	**Type** picklist

Field Name	Details
	Properties Create, Filter, Group, Restricted picklist, Sort **Description** The data type of the captured signature.
DocumentLength	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The length of the captured signature.
DocumentName	**Type** string **Properties** Create, Filter, Group, Sort **Description** The name of the captured signature image.
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the service appointment, work order, or work order line item that the service report is generated for.
Place	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** The place where the report was signed.
SignatureType	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort **Description** The role of the person signing the service report. Your org comes with one signature type, `Default`. A service report template can only contain one

Field Name	Details
	signature per type. If you plan to collect multiple signatures on service reports, create additional values for the Signature Type field. Create at least one value for every role that might need to sign a service report. For example, `Technician`, `Customer`, `Supervisor`, or `Supplier`. If some service reports will be signed by multiple people in one role—for example, all technicians present at an appointment—create numbered types: `Technician 1`, `Technician 2`, and so forth. Note: You can create up to 1,000 signature types. You can't delete signature types, but you can deactivate them so they can't be used in service report templates. When you deactivate a type, it still appears on service report templates that used it, but you can't use it on new service report templates.
`SignedBy`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** The name of the person signing.
`SignedDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort **Description** The date and time of the signing.

Usage

Add signature blocks to service report templates to determine which signatures need to be gathered on reports that use the template. Service report templates can contain up to 20 signatures, and each signature must use a different Signature Type. For example, create a standard service report template that contains a customer signature and a technician signature.

To learn more about digital signatures, see Guidelines for Using Signatures on Service Reports.

DigitalWallet

The digital wallet entity represents a customer's digital wallet service. Commerce Payments can use a digital wallet as a payment source when processing payments through a payment gateway. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

To access Commerce Payments entities, your org must have a Salesforce Order Management license with the Payment Platform org permission activated. Commerce Payments entities are available only in Lightning Experience.

Fields

Field	Details
AccountId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The account of the customer owns the digital wallet.
AuditEmail	**Type** email **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Email of the digital wallet owner. This field is available in API v49.0 and later. It does not appear in the UI by default for Salesforce orgs that upgraded from v48.0. Users must add it to the DigitalWallet page layout on their own.
Comments	**Type** textarea **Properties** Create, Nillable, Update **Description** Users can provide additional details about the digital wallet. Supports a maximum of 1000 characters.
CompanyName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description Company of the digital wallet owner.
Customer	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** Customer name of the digital wallet owner.
DigitalWalletNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** System-generated reference number for the digital wallet.
Email	**Type** email **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Email of the digital wallet owner.
GatewayToken	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Gateway token used when the digital wallet interacts with the payment gateway.
GatewayTokenDetails	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Unique ID generated by the payment gateway for the card for future transactions.
IpAddress	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description The IP address of the digital wallet owner. This field is available in API v49.0 and later. It does not appear in the UI by default for Salesforce orgs that upgraded from v48.0. Users must add it to the DigitalWallet page layout on their own.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
MacAddress	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The MAC address of the digital wallet owner. This field is available in API v49.0 and later. It does not appear in the UI by default for Salesforce orgs that upgraded from v48.0. Users must add it to the DigitalWallet page layout on their own.
NickName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** User-defined nickname for the digital wallet.
PaymentGatewayId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort

Field	Details
	Description Gateway used with transactions for the digital wallet.
PaymentMethodAddress	**Type** address **Properties** Filter, Nillable **Description** Part of the address for the payment method.
PaymentMethodCity	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Part of the address for the payment method.
PaymentMethodCountry	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Part of the address for the payment method.
PaymentMethodGeocodeAccuracy	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Part of the address for the payment method.
PaymentMethodLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Part of the address for the payment method.
PaymentMethodLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update

Field	Details
	Description Part of the address for the payment method.
PaymentMethodPostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Part of the address for the payment method.
PaymentMethodState	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Part of the address for the payment method.
PaymentMethodStreet	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Part of the address for the payment method.
Phone	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Phone number of the digital wallet owner. This field is available in API v49.0 and later. It does not appear in the UI by default for Salesforce orgs that upgraded from v48.0. Users must add it to the DigitalWallet page layout on their own.
ProcessingMode	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** Defines whether the digital wallet is used for transactions made inside or outside the payment platform.

Field	Details
	Possible values are: • `External:` Transactions happened outside of the Salesforce payments platform. • `Salesforce:` Salesforce made and recorded an external call to the payment platform. This field is available in API v49.0 and later. It does not appear in the UI by default for Salesforce orgs that upgraded from v48.0. Users must add it to the DigitalWallet page layout on their own. **Important:** `ProcessingMode` is required to create a DigitalWallet entity.
`Status`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Defines the state of the digital wallet as a payment source. Possible values are: • `Active:` Customers can make payments with the digital wallet. • `Canceled:` The digital wallet can no longer be used for payments. This status can't be changed. • `Inactive:` The digital wallet can't be used for payments until a user changes its status to Active.

DirectMessage

Represents a direct message conversation between multiple users in Chatter. This object is available in API version 38.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`, `update()`

Special Access Rules

You must have the Manage Chatter Messages and Direct Messages permission enabled to access the DirectMessage object.

Fields

Field	Details
`Name`	**Type** string

Field	Details
	Properties Filter, Group, idLookup, Sort, Update **Description** A default value that isn't visible to users.
`Subject`	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** Subject of the overall direct message conversation.

Usage

DirectMessage is an object used by Salesforce to control DirectMessage conversations. It represents a record of a direct message conversation, but doesn't include conversation data, such as posts or comments. It is most frequently used to moderate direct message data in order to meet data compliance regulations.

Division

A logical segment of your organization's data. For example, if your company is organized into different business units, you could create a division for each business unit, such as "North America," "Healthcare," or "Consulting." Available only if the organization has the Division permission enabled.

Supported Calls

`create()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- Divisions must be enabled for your organization to access this object. To discover whether divisions have been enabled for an organization, inspect the User or Group object for the `DefaultDivision` field—if it is present, then divisions have been enabled, and this field (the field is named Division in objects other than User and Group) will be available in all relevant objects.
- Customer Portal users can't access this object.

Fields

Field	Details
`IsActive`	**Type** boolean

Field	Details
	Properties Create, Defaulted on create, Filter, Update **Description** Indicates whether the division is active (`true`) or not (`false`). Label is **Active**.
`IsGlobalDivision`	**Type** boolean **Properties** Defaulted on createFilter **Description** Indicates whether the division is your organization's global default division (`true`) or not (`false`). Label is **Global Division**.
`Name`	**Type** string **Properties** Create, Filter, Update **Description** A descriptive name for the division. Limit: 80 characters.
`SortOrder`	**Type** int **Properties** Create, Filter, Nillable, Update **Description** The order in which this division name appears in the Division picklist field when creating or editing users in the Salesforce user interface.

Usage

The values available for that field are the global division ID for the organization, created when divisions are first enabled, and any other division IDs that have been created. The division ID associated with a user is populated in the objects owned or created by the user.

You can use the division ID to make searches, reports, and list views run more quickly and return more relevant results if an organization has very large data sets. For more information, see the Salesforce online help, in the Fields description for the object.

You can use WITH in SOSL to pre-filter results based on division. This is faster than specifying the division in a WHERE clause.

Note: The User object has a `Division` field that is unrelated to this object. The `Division` field is a standard text field similar to Company or Department that has no special properties. Do not confuse it with the `DefaultDivision` field, which does relate to this object.

SEE ALSO:

Object Basics

DivisionLocalization

When the Translation Workbench is enabled for your organization, the DivisionLocalization object provides the translation of the label for a division.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- Your organization must be using Professional, Enterprise, Developer, Unlimited, or Performance Edition and be enabled for the Translation Workbench.
- To view this object, you must have the “View Setup and Configuration” permission.

Fields

Field	Details
`Language`	**Type** string **Properties** Create, Filter, Nillable, Restricted picklist **Description** The language for this translated label.
`NamespacePrefix`	**Type** string **Properties** Filter, Nillable **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field’s value is the namespace prefix of the Developer Edition org of the package developer.

Field	Details
	• In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
`ParentId`	**Type** reference **Properties** Create, Filter, Nillable **Description** The ID of the Division associated with the label that is being translated.
`Value`	**Type** string **Properties** Create, Filter, Nillable, Update **Description** The actual translated label for the division. Label is **Translation**.

Usage

Use this object to translate the labels of your divisions into the different languages supported by Salesforce.

Document

Represents a file that a user has uploaded. Unlike Attachment records, documents are not attached to a parent object.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

You must have the “Edit” permission on documents and the appropriate access to the Folder that contains a document in order to create or update a document in that Folder.

Fields

Field	Details
`AuthorId`	**Type** reference

Field	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the User who is responsible for the Document.
`Body`	**Type** base64 **Properties** Create, Nillable, Update **Description** Required. Encoded file data. If specified, then do not specify a URL.
`BodyLength`	**Type** int **Properties** Filter, Group, Sort **Description** Size of the file (in bytes).
`ContentType`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Type of content. Label is **Mime Type**. Limit: 120 characters. If the `Don't allow HTML uploads as attachments or document records` security setting is enabled for your organization, you cannot upload files with the following file extensions: `.htm`, `.html`, `.htt`, `.htx`, `.mhtm`, `.mhtml`, `.shtm`, `.shtml`, `.acgi`, `.svg`.
`Description`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Text description of the Document. Limit: 255 characters.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is **Document Unique Name**. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`FolderId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Required. ID of the Folder that contains the document.
`IsBodySearchable`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the contents of the object can be searched using a SOSL `FIND` call. The `ALL FIELDS` search group includes the content as a searchable field.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`IsInternalUseOnly`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the object is only available for internal use (`true`) or not (`false`). Label is **Internal Use Only**.

Field	Details
IsPublic	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the object is available for external use (`true`) or not (`false`). Label is **Externally Available**.
Keywords	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Keywords. Limit: 255 characters.
LastReferencedDate	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. Name of the document. Label is **Document Name**.
NamespacePrefix	**Type** string **Properties** Filter, Group, Sort, Nillable

Field	Details
	Description The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
`Type`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** File type of the Document. In general, the values match the file extension for the type of Document (such as pdf or jpg). Label is **File Extension**.
`Url`	**Type** string **Properties** Create, Filter, Nillable, Group, Sort, Update **Description** URL reference to the file (instead of storing it in the database). If specified, do not specify the `Body` or `BodyLength`.

Usage

When creating or updating a document, you can specify a value in either the `Body` or `Url` fields, but not both.

Encoded Data

The API sends and receives the binary file data encoded as a base64 data type. Prior to creating a record, clients must encode the binary file data as base64. Upon receiving an API response, clients must decode the base64 data to binary (this conversion is usually handled for you by the SOAP client).

Maximum Document Size

You can only create or update documents to a maximum size of 5 MB.

SEE ALSO:

Object Basics

DocumentAttachmentMap

Maps the relationship between an EmailTemplate and its attachment, which is stored as a Document.

Supported Calls

`create()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`DocumentId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the document that this object tracks.
`DocumentSequence`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** Represents the order that the attachments will be included in the email defined by the EmailTemplate specified by the `DocumentId`. Label is **Attachment Sequence**. The first attachment is given a value of 0, and each subsequent attachment is given a value incremented by 1.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update

Field	Details
	Description ID of the EmailTemplate parent. The attachment identified by `DocumentId` is attached to the EmailTemplate specified in this field.

Usage

Use this object to map the relationship of an EmailTemplate to its attachments, and to specify the order of the attachments.

SEE ALSO:

EmailTemplate

DocumentTag

Associates a word or short phrase with a Document.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ItemId`	**Type** reference **Properties** Create, Filter **Description** ID of the tagged item.
`Name`	**Type** string **Properties** Create, Filter **Description** Name of the tag. If this value does not already exist, a new TagDefinition is created and becomes the parent of this Tag object. Otherwise, a TagDefinition with the same name becomes the parent of this Tag object. Parent relationships are created automatically.
`TagDefinitionId`	**Type** reference

Field Name	Details
	Properties Filter **Description** ID of the parent TagDefinition object that owns the tag.
`Type`	**Type** picklist **Properties** Create, Filter, Restricted picklist **Description** Defines the visibility of a tag. Valid values: • `Public`—The tag can be viewed and manipulated by all users in an organization. • `Personal`—The tag can be viewed or manipulated only by a user with a matching `OwnerId`.

Usage

DocumentTag stores the relationship between its parent TagDefinition and the Document being tagged. Tag objects act as metadata, allowing users to describe and organize their data.

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

Domain

Read-only object that represents a custom Web address assigned to a site in your organization. This object is available in API version 26.0 and later.

To access this object, Salesforce Sites, Sites, or Site.com must be enabled for your organization.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

- Customer Portal users can't access this object.
- To view this object, you must have the "View Setup and Configuration" permission.
- Site.com Publisher users have read-only API access to the Domain and DomainSite objects.

Fields

Field	Description
CnameTarget	**Type** string **Properties** Filter, Nillable, Sort **Description** The canonical name (CNAME) of the external host or server. If you use a custom domain with a non-Salesforce provider, such as your own external server or CDN provider, to serve your domain, this field points to the CNAME of the external provider. This field is available in API version 43.0 and later.
Domain	**Type** string **Properties** Filter, idLookup, Sort **Description** The branded custom Web address within the global namespace identified by this domain's type. In the Domain Name System (DNS) global namespace, this field is the custom Web address that you registered with a third-party domain name registrar. The custom Web address can be used to access the site of this domain.
DomainType	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The global namespace that this custom Web address belongs to. This value is set to DNS for custom Web addresses in the global DNS. DomainType can have the following value: • `DNS`—Domain Name System (DNS)
HttpsOption	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Current HTTPS option. Values may include: • `CdnPartner`—Content Delivery Network (CDN) partner of Salesforce • `Community`—Experience Cloud site Force.com Subdomain • `CommunityAlt`—Experience Cloud site My Domain

Field	Description
	• `ExternalHttps`—Domain is served by an external host • `NoHttps`—No HTTPS • `OrgDomain`—My Domain • `Sites`—Salesforce Sites Subdomain • `SitesAlt`—Salesforce Sites My Domain • `SitesRuntime`—Salesforce Cloud This field is available in API version 47.0 and higher.
`OptionsExternalHttps`	**Type** boolean **Properties** Filter **Description** Indicates whether the domain supports secure connections (`true`) or not (`false`) via a non-Salesforce content delivery network (CDN) or endpoint. The value of this field is used only if the domain is not pointing to the *`yourdomain.your18characterOrgId`*`.live.siteforce.com` CNAME target. This field is deprecated in API version 47.0 and later. Use HttpsOption instead.
`OptionsHstsHeaders`	**Type** boolean **Properties** Filter **Description** Indicates whether the HTTP Strict Transport Security (HSTS) response header is included in requests to this domain (`true`) or not (`false`). This field is available in API version 47.0 and higher.

Usage

Use this read-only object to query the domains that are associated with each website in your organization.

DomainSite

Read-only junction object that joins together the Site and Domain objects. This object is available in API version 26.0 and later.

To access this object, Salesforce Sites or Site.com must be enabled for your organization.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

- Customer Portal users can't access this object.
- To view this object, you must have the "View Setup and Configuration" permission.
- Site.com Publisher users have read-only API access to the Domain and DomainSite objects.

Fields

Field	Description
DomainId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the associated Domain.
PathPrefix	**Type** string **Properties** Filter, Group, Sort **Description** Shows where a site's root exists on a domain. Can only be set for custom Web addresses. Always begins with a `/`.
SiteId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the associated Site.

Usage

Use this read-only object to query or retrieve information about your Lightning Platform site.

DsarPolicy

Represents a Data Subject Access Request (DSAR) policy created in the Privacy Center managed package. DSAR policies anonymize or transfer personal data from your org at your customer's request. This object is available in API version 50.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

This object is for Privacy Center customers with the ReadAllData or PrivacyDataAccess permissions.

Fields

Field	Details
`Description`	**Type** textarea **Properties** Filter, Group, Nillable, Sort **Description** Description of the policy. The description is limited to 255 characters.
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** Developer name of the policy.
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this policy can be used (`true`) or not (`false`) for data subject (customer) requests. The default value is `false`.
`Language`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language of the MasterLabel. Possible values are: • `da`—Danish • `de`—German

Field	Details
	• en_US—English • es—Spanish • es_MX—Spanish (Mexico) • fi—Finnish • fr—French • it—Italian • ja—Japanese • ko—Korean • nl_NL—Dutch • no—Norwegian • pt_BR—Portuguese (Brazil) • ru—Russian • sv—Swedish • th—Thai • zh_CN—Chinese (Simplified) • zh_TW—Chinese (Traditional)
MasterLabel	**Type** string **Properties** Filter, Group, Sort **Description** Label of the policy.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as the object.

DsarPolicyLog
Sharing is available for the object.

DsarPolicyLog

Represents the history of Data Subject Access Request (DSAR) policy execution requests. This log records the status and results of executed DSAR policies for a customer. This object is available in API version 50.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

This object is for Privacy Center customers with the ReadAllData or PrivacyDataAccess permissions.

Fields

Field	Details
CompletionDateTime	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time when the data subject access request was completed. Available in API version 51.0 and later.
DataSubjectId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The 15–18 character ID of the data subject making the request. Available in API version 51.0 and later.
DeletedDateTime	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time when the file generated for the data subject's request is deleted. Available in API version 51.0 and later.
DeveloperName	**Type** string **Properties** Filter, Group, Sort **Description** Developer name of the policy.
DownloadedDateTime	**Type** dateTime **Properties** Filter, Nillable, Sort

Field	Details
	Description The most recent date and time when the data subject downloaded the file generated at their request. Available in API version 51.0 and later.
`DsarError`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Represents an error in generating the file for the data subject access request. Available in API version 51.0 and later.
`DsarPolicyId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the DSAR policy.
`FileURL`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The result of the DSAR policy execution. The URL links to a downloadable file that contains the customer data.
`Language`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language of the MasterLabel. Possible values are: • `da`—Danish • `de`—German • `en_US`—English • `es`—Spanish • `es_MX`—Spanish (Mexico) • `fi`—Finnish • `fr`—French

Field	Details
	• `it`—Italian • `ja`—Japanese • `ko`—Korean • `nl_NL`—Dutch • `no`—Norwegian • `pt_BR`—Portuguese (Brazil) • `ru`—Russian • `sv`—Swedish • `th`—Thai • `zh_CN`—Chinese (Simplified) • `zh_TW`—Chinese (Traditional)
`MasterLabel`	**Type** string **Properties** Filter, Group, Sort **Description** Label of the policy.
`RequestDateTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time when a data subject requested access to their data in the org. Available in API version 51.0 and later.
`RequestStatus`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The status of the policy execution. Possible values are: • `Complete` • `Deleted` • `Downloaded` • `Expired` • `Failed` • `In Progress`

Field	Details
RequestUserId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the org employee or admin making the request on behalf of the data subject. Available in API version 51.0 and later.

Associated Objects

This object has the following associated objects. Unless noted, they're available in the same API version as the object.

DsarPolicy
Sharing is available for the object.

DuplicateJob

Represents an instance of a job that identifies duplicates among existing records in the system.

This object is available in API versions 42.0 and later.

A duplicate job is the parent of the DuplicateRecordSet instances that it generates. The duplicate record items in a set generated by a duplicate job are of one object type.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`

Special Access Rules

As of Summer '20 and later, only users with the View Setup and Configuration permission can access this object.

Fields

Field Name	Details
DuplicateJobDefinitionId	**Type** reference **Properties** Filter, Group, Sort, Update **Description** The ID of the corresponding duplicate job definition.

Field Name	Details
DuplicateJobStatus	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The current status of a duplicate job. Valid values are `Not Started`, `In Progress`, `Completed`, `Canceled`, `Failed`, `Results Deleted`.
EndDateTime	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time when a duplicate job was completed.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when a duplicate job was last referenced.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when a duplicate job was last viewed.
Name	**Type** string **Properties** Filter, Group, idLookup, Sort, Update **Description** The name of a duplicate job.
NumDuplicateRecordItems	**Type** int **Properties** Filter, Group, Sort

Field Name	Details
	Description The total number of duplicate records identified as a result of invoking a duplicate job.
NumDuplicateRecordSets	**Type** int **Properties** Filter, Group, Sort **Description** The number of duplicate record sets identified as a result of invoking a duplicate job.
NumRecordsScanned	**Type** int **Properties** Filter, Group, Sort **Description** The number of records scanned as a result of invoking a duplicate job.
ResultListViewId	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** List view metadata for displaying the duplicate record sets identified as result of invoking a duplicate job.
StartDateTime	**Type** dateTime **Properties** Filter, Sort **Description** The date and time when a duplicate job was invoked.

DuplicateJobDefinition

Setup object defining a job that identifies duplicate record items globally.

This object is available in API versions 42.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

As of Summer '20 and later, only users with the View Setup and Configuration permission can access this object.

Fields

Field Name	Details
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The name of the user who created a duplicate job.
`Language`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language in the user's personal settings.
`MasterLabel`	**Type** string **Properties** Filter, Group, Sort **Description** The label of the duplicate job.
`SobjectSubtype`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The object subtype. Valid values are `Person Account` or `None`.
`SobjectType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort

Field Name	Details
	Description The object type: account, contact, or lead.

DuplicateJobMatchingRule

Represents a MatchingRule to be used with a DuplicateJob sharing the corresponding DuplicateJobMatchingRuleDefinition.

This object is available in API versions 42.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

As of Summer '20 and later, only users with the View Setup and Configuration permission can access this object.

Fields

Field Name	Details
`DuplicateJobId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the corresponding DuplicateJob.
`DuplicateJobMatchRuleDefId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the matching rule defined for the corresponding DuplicateJobMatchingRuleDefinition.
`MatchingRuleBooleanFilter`	**Type** textarea **Properties** Filter, Sort

Field Name	Details
	Description Boolean logic of the MatchingRule for this DuplicateJobMatchingRule.
`MatchingRuleDescription`	**Type** textarea **Properties** Filter, Group, Nillable, Sort **Description** Description of the matching rule for this DuplicateJobMatchingRule.
`MatchingRuleName`	**Type** string **Properties** Filter, Group, Sort **Description** The name of the matching rule defined for this particular DuplicateJob invocation.

DuplicateJobMatchingRuleDefinition

Setup object specifying a MatchingRule to use with DuplicateJob instances that share a DuplicateJobDefinition.

This object is available in API versions 42.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `search()`

Special Access Rules

As of Summer '20 and later, only users with the View Setup and Configuration permission can access this object.

Fields

Field Name	Details
`DuplicateJobDefinitionId`	**Type** reference **Properties** Filter, Group, Sort

Field Name	Details
	Description ID of DuplicateJobDefinition (master) for this DuplicateJobMatchingRuleDefinition (detail).
`MatchingRuleId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the MatchingRule to be used with this DuplicateJobMatchingRuleDefinition.

DuplicateRecordItem

Represents an individual record that's part of a duplicate record set. Use this object to create custom report types.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

To access this object, enable Duplicate Management. A Salesforce admin can grant access to any user with a Sales Cloud or CRM user license.

Fields

Field Name	Details
`DuplicateRecordSetId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The duplicate record set that the duplicate record item is assigned to.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort

Field Name	Details
	Description The autogenerated name that's given to the Duplicate Record Item. Label is `Duplicate Record Item Name`.
`RecordId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The name of the record as it appears on the record's detail page.

DuplicateRecordSet

Represents a group of records that have been identified as duplicates. Each duplicate record set contains one or more duplicate record items. Use this object to create custom report types and view the results of duplicate jobs.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

To access this object, activate duplicate rules. A Salesforce admin must give users read and write access.

Fields

Field Name	Details
`DuplicateRuleId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The duplicate rule used to identify this list of duplicate records. **Label** Duplicate Rule ID
`LastReferencedDate`	**Type** dateTime

Field Name	Details
	Properties Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (LastReferencedDate) but not viewed it.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The autogenerated name that's given to the duplicate record set. Label is Duplicate Record Set Name.
RecordCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of record items in the set.
ParentId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ParentId represents the parent of a duplicate rule or duplicate job. A ParentId is polymorphic. The label is Parent. This field is available in API versions 42.0 and later.

DuplicateRule

Represents a duplicate rule for detecting duplicate records.

Supported Calls

`describeSObjects()`, `describeLayout()`, `query()`, `retrieve()`, `search()`

Special Access Rules

As of Summer '20 and later, only users with the View Setup and Configuration permission can access this object.

Fields

Field Name	Details
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The developer name for the duplicate rule.
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a duplicate rule is active (`true`) or not (`false`). This field is read only.
`Language`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language for the duplicate rule.
`MasterLabel`	**Type** string **Properties** Filter, Group, Sort

Field Name	Details
	Description The label for the duplicate rule.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
`sObjectType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of object the duplicate rule is defined for. For example, account, contact, or lead.

Usage

You can use the API to view a duplicate rule's details. To create, edit, or delete duplicate rules, use the UI.

Use DuplicateRule to get the sObject type.

DuplicateRule is unavailable in some orgs.

ElectronicMediaGroup

Represents the type of media that you can associate with a product or category.This object is available in API version 49.0 and later.

Supported Calls

`describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You must have the B2B Commerce license and a CMS workspace to access a web store.

Fields

Field	Details
`CurrencyIsoCode`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The default value is `USD`.
`Description`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Description of the store.
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.

Field	Details
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
Name	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** Name of the media group.
OwnerId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the owner of the ElectronicMediaGroup object. For external routing, allows the object to be used in the Streaming API to listen to events whenever a ElectronicMediaGroup record is created, modified, or deleted.
UsageType	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Possible values are: • Attachment • Banner • Listing • Standard • Tile

ElectronicMediaUse

Represents the usage of media. This object is available in API version 49.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

You must have the B2B Commerce license and a CMS workspace to access a web store.

Fields

Field	Details
`CurrencyIsoCode`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The default value is `USD`. Possible values are: • `USD`—U.S. Dollar
`ElectronicMediaGroupId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the electronic media group.
`ElectronicMediaId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the electronic media.
`ImplementorType`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The type of implementor. Available implementors of ElectronicMediaUse include: • ProductMedia • ProductCategoryMedia

Field	Details
`SortOrder`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The order that electronic media is displayed in.

EmailContent

Represents a marketing email asset for use with Pardot. This object is available in API version 50.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

EmailContent is only available for orgs that use Pardot. The Manage Email Content user permission is required. Users also need the CRM User, Sales, or Service User permission set. EmailContent isn't available for custom portal or guest users.

Fields

Field	Details
`ClickThroughRate`	**Type** percent **Properties** Filter, Nillable, Sort **Description** The percentage of visitors who click links contained in emails delivered (sent minus bounces) to them. Multiple clicks for a same link are counted.
`ClickToOpenRatio`	**Type** percent **Properties** Filter, Nillable, Sort **Description** The number of unique clicks divided by unique HTML opens.

Field	Details
DeliveryRate	**Type** percent **Properties** Filter, Nillable, Sort **Description** The percentage of the emails that were delivered compared to the number that bounced (soft and hard). Note: this data includes emails that were delivered to the recipient's spam folder.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of the email content, for example, Promotion Mass Mailing.
HtmlBody	**Type** textarea **Properties** Nillable **Description** The body of the email in HTML format. The field is read-only.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp that indicates when the current user last viewed the record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, the record could have been referenced (LastReferencedDate) and not viewed.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update

Field	Details
	Description Name of the email asset.
OpenRate	**Type** percent **Properties** Filter, Nillable, Sort **Description** The percentage of unique HTML opens compared to the total number of emails delivered (sent minus bounces).
OptOutRate	**Type** percent **Properties** Filter, Nillable, Sort **Description** The percentage of users that have opted out compared to the total number of emails sent.
SpamComplaintRate	**Type** percent **Properties** Filter, Nillable, Sort **Description** The percentage of spam complaints compared to the total number emails sent.
Subject	**Type** textarea **Properties** Create, Filter, Nillable, Update **Description** Content of the subject line.
TemplateId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The Email Template field is mostly read-only. You can populate the Email Template field only during record create to prevent overwriting data on the email content record.
TextBody	**Type** textarea

Field	Details
	Properties Create, Nillable, Update **Description** The body of the email in plain text format. The character limit is 384, 000.
`TotalDelivered`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The total number of emails minus hard and soft bounces. Note: this data includes emails that were delivered to the recipient's spam folder.
`TotalHardBounced`	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** The total number of emails that permanently returned to the sender because the address is invalid. A hard bounce can occur because the domain name doesn't exist or because the recipient is unknown.
`TotalOpens`	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** The total number of times a prospect's email client loaded the images in the HTML version of the email. We also record an open if the prospect clicks a link within the HTML or text email without downloading images. A click indicates that they viewed the message. Some email clients (Outlook, Apple Mail, Thunderbird) do not display images by default. Pardot counts an open each time the images load.
`TotalSent`	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** Read-only field. The total number of list emails sent, including bounced, opted-out, and invalid To: addresses.
`TotalSoftBounced`	**Type** int

Field	Details
	Properties Defaulted on create, Filter, Group, Nillable, Sort **Description** Read-only field. The total number of times a recipient's mail server acknowledged the email, but returned it to the sender. Sometimes it is because the recipient's mailbox is full or the mail server is temporarily unavailable. After 5 soft bounces, Pardot opts the prospect out of emails.
`TotalSpamComplaints`	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** Read-only field. The total number of prospects that reported the email as spam.
`TotalTrackedLinkClicks`	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** Read-only field. The number of times prospects clicked a link in the email.
`UniqueClickThroughRate`	**Type** percent **Properties** Filter, Nillable, Sort **Description** Read-only field. The percentage of visitors who clicked a link contained in an email
`UniqueOpens`	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** Read-only field. The number of prospects who loaded the images in the HTML version of the email. The Unique Opens category counts each recipient only one time, even if the prospect loaded images more than once.
`UniqueOptOuts`	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort

Field	Details
	Description Read-only field. The total number of prospects that have clicked the link to unsubscribe or opted out of all emails in the Email Preference Center. They are removed from future email sends.
`UniqueTrackedLinkClicks`	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** Read-only field. The number of times a prospect clicked a link in the email. This metric doesn't include multiple clicks of the same link.

EmailDomainFilter

Represents a filter that determines whether an email relay is restricted to a specific list of domains. This object is available in API version 43.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

You must have the "Email Administration," "Customize Application," and "View Setup" user permissions to use this object.

You must create an email relay in Setup or through the EmailRelay object before you can use the `EmailDomainFilter` object.

Fields

Field Name	Details
`EmailRelayId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the EmailRelay record.
`FromDomain`	**Type** textarea

Field Name	Details
	Properties Create, Nillable, Update **Description** Restricts the email relay to send emails based on the sender domains (`FromDomain`) listed in this field. This field is optional, accepts a list of comma-separated values, and supports the wildcard character.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the email domain filter is active (`true`) or not (`false`). Use this field to enable or disable the email domain filter.
`PriorityNumber`	**Type** int **Properties** Create, Filter, Group, idLookup, Nillable, Sort, Update **Description** Indicates the order in which the email domain filter is processed. Filters are evaluated in ascending order. The priority number must be unique. If this field is left blank, it is assigned the next available number and is processed last. Processing stops after the first matching filter is applied.
`ToDomain`	**Type** textarea **Properties** Create, Nillable, Update **Description** Restricts the email relay to send emails based on the recipient domains (`ToDomain`) listed in this field. This field is optional, accepts a list of comma-separated values, and supports the wildcard character.

Usage

Tip: If you also plan to activate Bounce Management and Email Compliance Management, confirm with your email admin that your company allows relaying email sent from Salesforce. For more information on bounce management, see Configure Deliverability Settings for Emails Sent from Salesforce.

EmailDomainKey

Represents a domain key for an organization's domain, used to authenticate outbound email that Salesforce sends on the organization's behalf. This object is available in API version 28.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Summer '20 and later, only authenticated internal and external users can access this object.

We've upgraded and replaced the original DKIM (DomainKeys Identified Mail) key feature, so that you can create a DKIM key with increased email security. For more information, see Setting Up More Secure DKIM Keys.

Fields

Field Name	Details
`AlternatePublicKey`	**Type** textarea **Properties** Nillable **Description** Read-only. Alternate public keys are used by Salesforce to auto-rotate domain keys. This field is available in API version 44.0 and later after activating the Critical Update.
`AlternateSelector`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The text used to distinguish the DKIM key from any other DKIM keys your organization uses for the specified domain. This field is available in API version 44.0 and later after activating the Critical Update.
`AlternateTxtRecordName`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The alternate TXT record name is used to create the CNAME record. Refer to the Usage section for more information. This field is available in API version 44.0 and later after activating the Critical Update.
`Domain`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The organization's domain name that the DKIM key is generated for.
`DomainMatch`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The specificity of match required on the sending domain name before signing with this DKIM key. Valid values are: • `DomainOnly`—Sign if sending domain matches at the domain level only (example.com but not mail.example.com) • `SubdomainsOnly`—Sign if sending domain matches at the subdomain level only (mail.example.com but not example.com) • `DomainAndSubdomains`—Sign if sending domain matches at the domain and subdomain levels (example.com and mail.example.com)
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this DKIM key is active (`true`) or not (`false`).
`KeySize`	**Type** int **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort **Description** Indicates the RSA key size, in bits. The possible values are: • 1024

Field Name	Details
	• 2048 This field is available in API version 45.0 and later.
`PrivateKey`	**Type** textarea **Properties** Create, Nillable, Update **Description** Once you activate the Critical Update, this field is no longer visible. The private portion of the DKIM key pair used to encrypt mail headers from your domain. Salesforce generates an encrypted `PrivateKey` if you don't specify a value when creating the DKIM key. If you do specify a value, it must be an existing valid `PrivateKey` from another EmailDomainKey object. This field doesn't contain the actual private key, but a value that represents the key in our system. Therefore: • The actual private key can't be leaked. • You can't use the value to do your own email signing.
`PublicKey`	**Type** textarea **Properties** Create, Nillable, Update **Description** Part of the domain key pair that mail recipients retrieve to decrypt the DKIM header and verify your domain. Add the `PublicKey` value to your domain's DNS records before you start signing with this domain key.
`Selector`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Text used to distinguish the DKIM key from any other DKIM keys your organization uses for the specified domain.
`TxtRecordName`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description Read-only. The TXT record name is used to create the CNAME record. Refer to the Usage section for more information. This field is available in API version 44.0 and later after activating the Critical Update.
`TxtRecordsPublishState`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The possible values are: • Published • Publishing in progress • Publishing failed This field is available in API version 44.0 and later after activating the Critical Update.

Usage

Create DKIM Keys with Increased Security

1. If your Salesforce org was created before Winter '19, enable the Critical Update. From Setup, enter *`Critical Updates`* in the Quick Find box, and then select **Critical Updates**. For Enable Redesigned DomainKeys Identified Mail (DKIM) Key Feature with Increased Email Security, click **Activate**.
2. Insert `Domain`, `DomainMatch`, `Selector`, and `AlternateSelector`. Salesforce publishes your TXT record to DNS.
3. Retrieve the `TxtRecordName` and `AlternateTxtRecordName` and use them to create and publish the CNAME and Alternate CNAME record to your domain's DNS.
   a. Create CNAME record using: ***`<selector>`***`._domainkey.`***`<domain>`*** `IN CNAME` ***`txtRecordName`***.
   b. Create Alternate CNAME record using: ***`<alternateSelector>`***`._domainkey.`***`<domain>`*** `IN CNAME` ***`alternateTxtRecordName`***.
4. Set the `IsActive` field to true.

Create DKIM Keys (pre-Winter '19 Version)

Note: The critical update activates for everyone on October 15, 2019. After that date, this approach to creating DKIM keys will no longer be available.

When you create a DKIM key, Salesforce generates a public and private key pair. Publish the public key in the DNS.

For each domain key you create, we recommend this sequence:

1. Insert the `Domain`, `DomainMatch`, and `Selector`.
2. Update your domain's DNS records.
   a. Locate the DNS record at ***`selector`***`._domainkey.`***`domain`***. For example, `mail._domainkey.mail.example.com`.

b. Add the `PublicKey` value, like this: `V=DKIM1; p=`***`public_key`***.

DKIM Signing Outbound Email

a. In addition, you can optionally put the record in testing mode, which instructs recipients to not make decisions based on the email signature. Add parameter `t=y` to the DNS entry: `V=DKIM1; t=y; p=`***`public_key`***.

3. Update the key via the API or UI to be active.

SEE ALSO:

Salesforce Help: Considerations for Creating DKIM Keys

Salesforce Help: Setting Up More Secure DKIM Keys

EmailMessage

Represents an email in Salesforce.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

EmailMessage is only available for orgs that use Email-to-Case or Enhanced Email, which is automatically enabled for most customers.

To use reply and forward functionality, `FromAddress` must specify an email address that exists in EmailMessageRelation, with a `RelationType` of `FromAddress`.

Customer Portal users have read access to EmailMessage if the value for the `ParentID` field is associated with a case. Otherwise, access is determined by sharing access of the associated task.

The `Status` field is mostly read-only. You can change the status only from *`New`* to *`Read`*.

`update()` is supported when an email record is in `Draft` status, and `IsPrivateDraft` is `false`. It is also supported if `Status` and `IsPrivateDraft` are `true` and `CreatedBy` is associated with the current user. When the email record status is not in `Draft` status, the `IsExternallyVisible` field and custom fields only can be updated.

Fields

Field	Details
`ActivityId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the activity that is associated with the email. Usually represents an open task that is created for the case owner when a new unread email message is received.

Field	Details
	`ActivityId` can only be specified for emails on cases. It's auto-created for other entities.
`BccAddress`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** A string array of email addresses for recipients who were sent a blind carbon copy of the email message. Include only email addresses that are not associated with Contact, Lead, or User records in Salesforce. If the recipient is a contact, lead, or user, add their ID to the `BccIds` field instead of adding their email address to the `BccAddress` field. When adding their ID, the email message is automatically associated with the contact, lead, or user. For an Experience Cloud site user who is not the sender of the email, this field returns null. You can't send emails unless there's at least one recipient.
`BccIds`	**Type** JunctionIdList **Properties** Create, Update **Description** A string array of IDs for contacts, leads, and users who were sent a blind carbon copy of the email message. Each ID is linked to an `EmailMessageRelation` record, which represents the relationship between an email message and a Contact, Lead, or User record. For an Experience Cloud site user who is not the sender of the email, this list is empty. Warning: Adding a `JunctionIdList` field name to the `fieldsToNull` property deletes all related junction records. This action can't be undone.
`CcAddress`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** A string array of email addresses for recipients who were sent a carbon copy of the email message. Include only email addresses that are not associated with Contact, Lead, or User records in Salesforce. If the recipient is a contact, lead, or user, add their ID to the `CcIds` field instead of adding their email address to the `CcAddress` field. Then the email message is automatically associated with the contact, lead, or user. You can't send emails unless there's at least one recipient.

Field	Details
CcIds	**Type** JunctionIdList **Properties** Create, Update **Description** A string array of IDs for contacts, leads, and users who were sent a carbon copy of the email message. Each ID is linked to an EmailMessageRelation record, which represents the relationship between an email message and a Contact, Lead, or User record. Warning: Adding a JunctionIdList field name to the fieldsToNull property deletes all related junction records. This action can't be undone.
ContentDocumentIds	**Type** JunctionIdList **Properties** Create, Update **Description** A string array of IDs for content documents, such as files and attachments, that are associated with an email. Each ID is linked to a ContentDocumentLink record, which represents the relationship between an email message and a content document record. Warning: Adding a JunctionIdList field name to the fieldsToNull property deletes all related junction records. This action can't be undone.
Division	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** A logical segment of your organization's data. For example, if your company is organized into different business units, you could create a division for each business unit, such as "North America," "Healthcare," or "Consulting." Available only if the organization has the Division permission enabled.
EmailTemplateId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description The email template, if any, that was chosen for the email. This field is populated in Lightning Experience only.
`FirstOpenedDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date the email was first opened. Note: To see this field, enable email tracking in your org.
`FromAddress`	**Type** email **Properties** Create, Filter, Nillable, Sort, Update **Description** The address that originated the email. When using this field, specify an email address that exists in EmailMessageRelation, with a `RelationType` of `FromAddress`.
`FromName`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** The sender's name. When using this field, specify an email address that exists in EmailMessageRelation, with a `RelationType` of `FromAddress`.
`HasAttachment`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the email was sent with an attachment (`true`) or not (`false`).
`Headers`	**Type** textarea **Properties** Create, Nillable, Update

Field	Details
	Description The Internet message headers of the incoming email. Used for debugging and tracing purposes. Does not apply to outgoing emails.
`HtmlBody`	**Type** textarea **Properties** Create, Nillable, Update **Description** The body of the email in HTML format. You can't send emails unless at least one of these fields has content. • Subject field • HTML Body or Text Body field As the sender, you can provide the content, or it can be automatically inserted using predefined values. An email template can also include the content for these fields.
`Incoming`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Indicates whether the email was received (`true`) or sent (`false`).
`IsBounced`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the email bounced. Note: To see this field, enable bounce management in your org.
`IsClientManaged`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** If EmailMessage is created with `IsClientManaged` set to true, users can modify `EmailMessage.ContentDocumentIds` to link file attachments even when the `Status` of the EmailMessage is not set to `Draft`.

Field	Details
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`IsExternallyVisible`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If the Experience Cloud site case feed is enabled, `IsExternallyVisible` controls the external visibility of emails in sites. When `IsExternallyVisible` is set to `true`—its default value—email messages are visible to external users in the case feed. Only emails with the `ParentId` field populated are available to be externally visible in sites. This field can't be updated if the email's `Status` is set to `Draft`.
`IsOpened`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the email has been opened. Note: To see this field, enable email tracking in your org.
`IsPrivateDraft`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** If `IsPrivateDraft` is set to `true`, then only the `CreatedById` user can view, update, and send this email draft. If `IsPrivateDraft` is set to `false`, then any user with permissions to work on the case can see these drafts. Once the email is sent (Email Status = Draft), then this field is updated to be `false`. Public drafts are loaded and visible in Salesforce Classic while Private Drafts are only used in Lightning Experience.

Field	Details
IsTracked	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the email is being tracked. Note: To see this field, enable email tracking in your org.
LastOpenedDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date the email was last opened. Note: To see this field, enable email tracking in your org.
MessageDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date the email was created.
MessageIdentifier	**Type** string **Properties** Create, Filter, Group, idLookup, Nillable, Sort, Update **Description** The ID of the email message.
ParentId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the case that's associated with the email.
RelatedToId	**Type** reference

Field	Details
	Properties Create, Filter, Group, Nillable, Sort **Description** The `RelatedToId` represents nonhuman objects such as accounts, opportunities, campaigns, cases, or custom objects. RelatedToIds are polymorphic. Polymorphic means a RelatedToId is equivalent to the ID of a related object.
`ReplyToEmailMessageId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the inbound or outbound email message the current email message is a reply to. It's not possible to reply to a message whose `Status` is `Draft`.
`Status`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The status of the email. The `Status` field is mostly read-only. You can change the status only from *`New`* to *`Read`*. Possible values are: • `0` (New) • `1` (Read) • `2` (Replied) • `3` (Sent) • `4` (Forwarded) • `5` (Draft) For emails not sent as part of a case, only the status `3` (Sent) is valid.
`Subject`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** The subject line of the email. You can't send emails unless at least one of these fields has content. • Subject field

Field	Details
	• HTML Body or Text Body field As the sender, you can provide the content, or it can be automatically inserted using predefined values. An email template can also include the content for these fields.
`TextBody`	**Type** textarea **Properties** Create, Nillable, Update **Description** The body of the email, in plain text format. If `TextBody` is not set, then it is extracted from `HtmlBody`. You can't send emails unless at least one of these fields has content. • Subject field • HTML Body or Text Body field As the sender, you can provide the content, or it can be automatically inserted using predefined values. An email template can also include the content for these fields
`ThreadIdentifier`	**Type** string **Properties** Create, Filter, Group, idLookup, Nillable, Sort, Update **Description** The ID of the email thread the email message belongs to.
`ToAddress`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** A string array of email addresses for recipients who were sent the email message. Include only email addresses that are not associated with Contact, Lead, or User records in Salesforce. If the recipient is a contact, lead, or user, add their ID to the `ToIds` field instead of adding their email address to the `ToAddress` field. Then the email message is automatically associated with the contact, lead, or user. You can't send emails unless there's at least one recipient.
`ToId`	**Type** JunctionIdList **Properties** Create, Update

Field	Details
	Description A string array of IDs for contacts, leads, and users who were sent a carbon copy of the email message. Each ID is linked to an `EmailMessageRelation` record, which represents the relationship between an email message and a Contact, Lead, or User record. Warning: Adding a `JunctionIdList` field name to the `fieldsToNull` property deletes all related junction records. This action can't be undone.
`ValidatedFromAddress`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** A picklist value with either the sender's address, validated org-wide email addresses that originated the email, or Email-to-Case Routing Address. Note: `ValidatedFromAddress` isn't suitable for use in Group By or Sort By statements. Use `FromAddress`instead.

Usage

If your org uses Email-to-Case, a case is created when an email is sent to one of your company's addresses. The email, which is related to the case by the `ParentID` field, is stored as an EmailMessage record. When users view the email, they see the EmailMessage record.

If your org uses Enhanced Email, each email is stored as an EmailMessage record and a Task record. When users view an email, they see the EmailMessage record.

Sample Code—Apex

This sample logs email activity in Salesforce.

```
// if EnhancedEmail Perm is not enabled, continue logging the email as a task

// if EnhancedEmail Perm is enabled, create an EmailMessage object
EmailMessage emailMessage = new EmailMessage();
emailMessage.status = '3'; // email was sent
emailMessage.relatedToId = '006B0000003weZGIAY'; // related to record e.g. an opportunity
emailMessage.fromAddress = 'sender@example.com'; // from address
emailMessage.fromName = 'Dan Perkins'; // from name
emailMessage.subject = 'This is the Subject!'; // email subject
emailMessage.htmlBody = '<html><body><b>Hello</b></body></html>'; // email body
// Contact, Lead or User Ids of recipients
String[] toIds = new String[]{'003B000000AxcEjIAJ'};
emailMessage.toIds = toIds;
// additional recipients who don't have a corresponding contact, lead or user id in the
Salesforce org (optional)
```

```
emailMessage.toAddress = 'emailnotinsalesforce@toexample.com, anotherone@toexample.com';
insert emailMessage; // insert

// Add Email Message Relation for id of the sender
EmailMessageRelation emr = new EmailMessageRelation();
emr.emailMessageId = emailMessage.id;
emr.relationId = '005B0000003qHvOIAU'; // user id of the sender
emr.relationType = 'FromAddress';
insert emr;
```

SEE ALSO:

Case

Object Basics

EmailMessageRelation

Represents the relationship between an email and contacts, leads, and users. This object is available in API version 37.0 and later.

Special Access Rules

EmailMessageRelation is only available for organizations that use Email-to-Case or Enhanced Email, which is automatically enabled for most customers.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`EmailMessageId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the `EmailMessage` record.
`RelationAddress`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort

Field Name	Details
	Description The email address of the sender or recipient. Note: If a record relates an email to an existing contact, lead, or user record in Salesforce, the value of `RelationAddress` is the current value of the email address. If the value is not set, it is auto-populated from `RelationId`.
`RelationId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The `RecordId` of the sender or recipient. Note: If a record relates an email to an email address that's not associated with an existing contact, lead, or user record in Salesforce, the value of `RelationId` is null.
`RelationObjectType`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The API name of the object type of the `RecordId` in the `RelationId` field. It can be a contact, lead, or user.
`RelationType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The type of relationship the contact, lead, or user has with the email message. Possible values include: • `ToAddress` • `CcAddress` • `BccAddress` • `FromAddress` • `OtherAddress` For an Experience Cloud site user who is not the sender of the email, no `BccAddress` relations are returned.

Usage

EmailMessageRelation allows an email to be related to contacts, leads, and users.

EmailRelay

Represents the configuration for sending an email relay. An email relay routes email sent from Salesforce through your company's email servers. This object is available in API version 43.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

You must have the "Email Administration," "Customize Application," and "View Setup" user permissions to use this object.

Fields

Field Name	Details
`Host`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Indicates the host name or IP address of your company's SMTP server.
`IsRequireAuth`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether (true) or not (false) authentication is required. When setting this field to true, the `TlsSetting` must be set to **`RequiredVerify`**. This field is available in API version 44.0 and later.
`Password`	**Type** encryptedstring **Properties** Create, Nillable, Update

Field Name	Details
	Description Specifies the password for relay host STMP authentication. When `IsRequireAuth` is set to true, this field is required. This field is available in API version 44.0 and later.
`Port`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Indicates the port number of your company's SMTP server. • 25 • 587 • 10025 • 11025
`TlsSetting`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Specifies whether Salesforce uses TLS for SMTP sessions. • `Off`: TLS is turned off. SMTP session continues through an insecure connection. • `Preferred`: If the remote server supports TLS, Salesforce upgrades the current SMTP session to use TLS. If TLS is unavailable, Salesforce continues the session without TLS. • `Required`: Salesforce continues the session only if the remote server supports TLS. If TLS is unavailable, Salesforce terminates the session without delivering the email. • `PreferredVerify`: If the remote server supports TLS, Salesforce upgrades the current SMTP session to use TLS. Before the session begins, Salesforce verifies that the certificate is signed by a valid certificate authority, and that the common name presented in the certificate matches the domain or mail exchange of the current connection. If TLS is available but the certificate is not signed or the common name does not match, Salesforce disconnects the session and does not deliver the email. If TLS is unavailable, Salesforce continues the session without TLS. • `RequiredVerify`: Salesforce continues the session only if the remote server supports TLS, the certificate is signed by a valid certificate authority, and the common name presented in the certificate matches the domain or

Field Name	Details
	mail exchange to which Salesforce is connected. If any of these criteria are not met, Salesforce terminates the session without delivering the email.
`Username`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Specifies the username for relay host STMP authentication. When `IsRequireAuth` is set to true, this field is required. This field is available in API version 44.0 and later.

Usage

An email relay must be associated with an active email domain filter to take effect. If you set up multiple email relays in one org, they are processed in the priority order of their email domain filters.

Tip: If you also plan to activate Bounce Management and Email Compliance Management, confirm with your email admin that your company allows relaying email sent from Salesforce. For more information on bounce management, see Configure Deliverability Settings for Emails Sent from Salesforce.

SEE ALSO:

EmailServicesFunction

EmailDomainFilter

EmailServicesAddress

An email service address.

Each email service has one or more email addresses to which users can send messages for processing. An email service only processes messages it receives at one of its addresses.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Summer '20 and later, only authenticated internal and external users can access this object.

Fields

Field	Details
`AuthorizedSenders`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Configures the email service address to only accept messages from the email addresses or domains listed in this field. If the email service address receives a message from an unlisted email address or domain, the email service performs the action specified in the `AuthorizationFailureAction` field of its associated email service. Leave this field blank if you want the email service address to receive email from any email address.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The name of the object in the API. This name can contain only underscores and alphanumeric characters and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This 25-character field must be unique among other EmailServicesAddress records under the same EmailServiceFunction parent. In managed packages, this field prevents naming conflicts on package installations. This field is automatically generated, but you can supply your own value if you create the record using the API. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance might be slow while Salesforce generates one for each record.
`EmailDomainName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A read only field you can query that contains the system-generated domain part of this email service address. The system generates a unique domain-part for each email service address to ensure that no two email service addresses are identical.
`FunctionId`	**Type** reference

Field	Details
	Properties Create, Filter, Group, Sort, Update **Description** The ID of the email service for which the email service address receives messages.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this object is active (true) or not (false).
`LocalPart`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The local-part of the email service address. The local-part of the address is the string that comes before the @ symbol. For the local-part of a Salesforce email address, all alphanumeric characters are valid, plus the following special characters: `! # $ % & amp; ' * / = ? ^ _ + - ` { | } ~ ,` The dot character (.) is also valid as long as it's not the first or last character. Email addresses aren't case-sensitive.
`RunAsUserId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The username of the user whose permissions the email service assumes when processing messages sent to this address.

Usage

This object supports the email services feature, which allows you to create automated processes that use Apex classes to process the contents, headers, and attachments of inbound email. For example, you can create an email service that automatically creates contact records based on contact information in messages.

SEE ALSO:

EmailServicesFunction

EmailServicesFunction

An email service.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Summer '20 and later, only authenticated internal and external users can access this object.

Fields

Field	Details
`AddressInactiveAction`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates what the email service does with messages received at an email address that is inactive. One of the following values: • `UseSystemDefault`—The system default is used. (In API version 41.0 and earlier, the value specified for this choice is `0`.) • `Bounce`—The email service returns the message to the sender with a notification that explains why the message was rejected. (In API version 41.0 and earlier, the value specified for this choice is `1`.) • `Discard`—The email service deletes the message without notifying the sender. (In API version 41.0 and earlier, the value specified for this choice is `2`.) • `Requeue`—The email service queues the message for processing in the next 24 hours. If the message is not processed within 24 hours, the email service returns the message to the sender with a notification that explains why the message was rejected. (In API version 41.0 and earlier, the value specified for this choice is `3`.)
`ApexClassId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Required. The ID of the Apex class that the email service uses to process inbound messages.

Field	Details
	This field is required for API version 12.0 and later.
AttachmentOption	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Indicates the types of attachments the email service accepts. One of the following values: • `None`—The email service accepts the message but discards any attachment. (In API version 41.0 and earlier, the value specified for this choice is `0`.) • `NoContent`—The attachment metadata (filename, MIME type, and so on) is provided to the Apex class, but the body is set to `null`. There was no previous numeric value for this choice. • `TextOnly`—The email service only accepts the following types of attachments: – Attachments with a Multipurpose Internet Mail Extension (MIME) type of text. – Attachments with a MIME type of application/octet-stream and a file name that ends with either a .vcf or .vcs extension. These are saved as text/x-vcard and text/calendar MIME types, respectively. (In API version 41.0 and earlier, the value specified for this choice is `1`.) • `BinaryOnly`—The email service only accepts binary attachments, such as image, audio, application, and video files. (In API version 41.0 and earlier, the value specified for this choice is `2`.) • `All`—The email service accepts any type of attachment. (In API version 41.0 and earlier, the value specified for this choice is `3`.)
AuthenticationFailureAction	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates what the email service does with messages that fail or do not support any of the authentication protocols if the `IsAuthenticationRequired` field is true. One of the following values: • `UseSystemDefault`—The system default is used. (In API version 41.0 and earlier, the value specified for this choice is `0`.) • `Bounce`—The email service returns the message to the sender with a notification that explains why the message was rejected. (In API version 41.0 and earlier, the value specified for this choice is `1`.) • `Discard`—The email service deletes the message without notifying the sender. (In API version 41.0 and earlier, the value specified for this choice is `2`.) • `Requeue`—The email service queues the message for processing in the next 24 hours. If the message is not processed within 24 hours, the email service returns the message

Field	Details
	to the sender with a notification that explains why the message was rejected. (In API version 41.0 and earlier, the value specified for this choice is `3`.)
`AuthorizationFailureAction`	**Type** picklist **Properties** Defaulted on create, Group, Sort, Create, Filter, Nillable, Restricted picklist, Update **Description** Indicates what the email service does with messages received from senders who are not listed in the `AuthorizedSenders` field on either the email service or email service address. One of the following values: • `UseSystemDefault`—The system default is used. (In API version 41.0 and earlier, the value specified for this choice is `0`.) • `Bounce`—The email service returns the message to the sender with a notification that explains why the message was rejected. (In API version 41.0 and earlier, the value specified for this choice is `1`.) • `Discard`—The email service deletes the message without notifying the sender. (In API version 41.0 and earlier, the value specified for this choice is `2`.) • `Requeue`—The email service queues the message for processing in the next 24 hours. If the message is not processed within 24 hours, the email service returns the message to the sender with a notification that explains why the message was rejected. (In API version 41.0 and earlier, the value specified for this choice is `3`.)
`AuthorizedSenders`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Configures the email service to only accept messages from the email addresses or domains listed in this field. If the email service receives a message from an unlisted email address or domain, the email service performs the action specified in the `AuthorizationFailureAction` field. Leave this field blank if you want the email service to receive email from any email address.
`ErrorRoutingAddress`	**Type** email **Properties** Create, Filter, Nillable, Sort, Update **Description** The destination email address for error notification email messages when `IsErrorRoutingEnabled` is `true`.

Field	Details
FunctionInactiveAction	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates what the email service does with messages it receives when the email service itself is inactive. One of the following values: • UseSystemDefault—The system default is used. (In API version 41.0 and earlier, the value specified for this choice is 0.) • Bounce—The email service returns the message to the sender with a notification that explains why the message was rejected. (In API version 41.0 and earlier, the value specified for this choice is 1.) • Discard—The email service deletes the message without notifying the sender. (In API version 41.0 and earlier, the value specified for this choice is 2.) • Requeue—The email service queues the message for processing in the next 24 hours. If the message is not processed within 24 hours, the email service returns the message to the sender with a notification that explains why the message was rejected. (In API version 41.0 and earlier, the value specified for this choice is 3.)
FunctionName	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the email service.
IsActive	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this object is active (true) or not (false).
IsAuthenticationRequired	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Configures the email service to verify the legitimacy of the sending server before processing a message. The email service uses the SPF, SenderId, and DomainKeys protocols to verify the sender's legitimacy: If the sending server passes at least one of these protocols and does not

Field	Details
	fail any, the email service accepts the email. If the server fails a protocol or does not support any of the protocols, the email service performs the action specified in the `AuthenticationFailureAction` field.
`IsErrorRoutingEnabled`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** When incoming email messages can't be processed, indicates whether error notification email messages are routed to a chosen address or to the senders.
`IsTextAttachmentsAsBinary`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** If `true`, text attachments are supplied to the Apex code as a `Messaging.BinaryAttachment` instead of as a `Messaging.TextAttachment`. This means that the body is supplied as an Apex Blob instead of as an Apex String.
`IsTextTruncated`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** This field is deprecated. It is not available as of API version 23.0 and is deprecated and hidden in versions 17.0 through 22.0. In all API versions, the email service now accepts inbound email messages up to the 10 MB size limit, without truncating the text. Previously, it indicated whether the email service truncated and accepted email messages with HTML body text, plain body text, and text attachments over approximately 100,000 characters (`true`) or rejected these email messages and notified the sender (`false`).
`IsTlsRequired`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Not currently in use.
`OverLimitAction`	**Type** picklist

Field	Details
	Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates what the email service does with messages if the total number of messages processed by all email services combined has reached the daily limit for your organization. One of the following values: • `UseSystemDefault`—The system default is used. (In API version 41.0 and earlier, the value specified for this choice is `0`.) • `Bounce`—The email service returns the message to the sender with a notification that explains why the message was rejected. (In API version 41.0 and earlier, the value specified for this choice is `1`.) • `Discard`—The email service deletes the message without notifying the sender. (In API version 41.0 and earlier, the value specified for this choice is `2`.) • `Requeue`—The email service queues the message for processing in the next 24 hours. If the message is not processed within 24 hours, the email service returns the message to the sender with a notification that explains why the message was rejected. (In API version 41.0 and earlier, the value specified for this choice is `3`.) The system calculates the limit by multiplying the number of user licenses by 1,000.

Usage

This object supports the email services feature, which allows you to create automated processes that use Apex classes to process the contents, headers, and attachments of inbound email. For example, you can create an email service that automatically creates contact records based on contact information in messages.

SEE ALSO:

EmailServicesAddress

EmailStatus

Represents the status of email sent.

Supported Calls

`describeSObjects()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
EmailTemplateName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the EmailTemplate.
FirstOpenDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date when the email was first opened by recipient. Label is **Date Opened**.
LastOpenDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date when the email was last opened by recipient.
TaskId	**Type** reference **Properties** Filter, Group, Sort **Description** The activity (task or event) associated with the email. Label is **Activity ID**.
TimesOpened	**Type** int **Properties** Filter, Group, Sort **Description** Number of times the recipient opened the email.
WhoId	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The WhoId represents a human such as a lead or a contact. WhoIds are polymorphic. Polymorphic means a WhoId is equivalent to a contact's ID or a lead's ID. The label is `Name ID`.

SEE ALSO:

EmailTemplate

EmailTemplate

Represents a template for mass email, or email sent when the activity history related list of a record is modified.

Note: You can't send a mass email using a Visualforce email template.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`ApiVersion`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The API version for this class. Every class has an API version specified at creation.
`Body`	**Type** textarea **Properties** Create, Nillable, Update **Description** Content of the email. Limit: 384 KB.

Field	Details
BrandTemplateId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Required. ID of the BrandTemplate associated with this email template. The brand template supplies letterhead information for the email template.
DeliveryRate	**Type** percent **Properties** Filter, Nillable, Sort **Description** Read-only. The percentage of the emails that were delivered compared to the number that bounced (soft and hard). Note: this data includes emails that were delivered to the recipient's spam folder. This field is available in API version 46.0 and later. To access this field, your org must use High Velocity Sales (HVS) and users need the High Velocity Sales User or High Velocity Sales Cadence Creator permission set. This field value includes emails sent via the ListEmail object or HVS sales cadences.
Description	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the template, for example, Promotion Mass Mailing.
DeveloperName	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is **Template Unique Name**. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.

Field	Details
Encoding	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Character set encoding for the template.
EnhancedLetterheadId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the enhanced letterhead associated with the email template. Note: To use an enhanced letterhead, associate it with a Lightning email template that uses the HML merge language.
EntityType	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, **Description** When `UIType` is `2` (Lightning Experience) or `3` (Lightning ExperienceSample), `EntityType` indicates which entities this template can be used with (for example, account or lead). Valid values are standard object ID prefixes: 001 for account, 003 for contact, 006 for opportunity, and 00Q for lead, 500 for case, and 701 for campaign. This field has been removed in API version 39.0. Use `RelatedEntityType` instead.
FolderId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the folder that contains the template.
FolderName	**Type** string **Properties** Filter, Nillable, Sort **Description** The name of the folder that contains the template.

Field	Details
HasSalesforceFiles	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If the email template has attachments from Salesforce Files. The default value is false.
HtmlValue	**Type** textarea **Properties** Create, Nillable, Update **Description** This field contains the content of the email message, including HTML coding to render the email message. Limit: 384 KB.
IsActive	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates that this template is active if `true`, or inactive if `false`.
IsBuilderContent	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If the email template was made in Email Template Builder. The default value is false.
LastUsedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date and time when this EmailTemplate was last used.
Markup	**Type** textarea **Properties** Create, Nillable, Update

Field	Details
	Description The Visualforce markup, HTML, JavaScript, or any other Web-enabled code that defines the content of the template.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Name of the template. Label is **Email Template Name**.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix. This field cannot be accessed unless the logged-in user has the Customize Application permission.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner of the template.
`RelatedEntityType`	**Type** picklist

Field	Details
	Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** When `UIType` is `2` (Lightning Experience) or `3` (Lightning ExperienceSample), `RelatedEntityType` indicates which entities this template can be used with. Valid values are the entity API name: "Account" for account, "Contact" for contact, "Opportunity" for opportunity, "Lead" for lead, and so on. The value can be any entity the user has read access to (including custom entities) but not virtual entities, setup entities, or platform entities. No restrictions exist at the schema level.
`Subject`	**Type** string **Properties** Create, Group, Nillable, Sort, Update **Description** Content of the subject line.
`TemplateStyle`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** Style of the template. Possible values are: • `formalLetter`—Formal Letter • `freeForm`—Free Form Letter • `newsletter`—Newsletter • `none`—No Email Layout • `products`—Products • `promotionLeft`—Promotion (Left) • `promotionRight`—Promotion (Right)
`TemplateType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** Type of template. Possible values are: • `custom`—Custom

Field	Details
	• `html`—HTML • `text`—Text • `visualforce`—Visualforce
`TimesUsed`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Number of times this template has been used.
`TotalDelivered`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Read-only. The total number of emails sent minus hard and soft bounces. Note: this data includes emails that were delivered to the recipient's spam folder. This field is available in API version 46.0 and later. To access this field, your org must use High Velocity Sales (HVS) and users need the High Velocity Sales User or High Velocity Sales Cadence Creator permission set. This field value includes emails sent via the ListEmail object or HVS sales cadences.
`TotalHardBounced`	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** Read-only. The total number of emails that permanently bounced back to the sender because the address is invalid. A hard bounce can occur because the domain name doesn't exist or because the recipient is unknown. This field is available in API version 46.0 and later. To access this field, your org must use High Velocity Sales (HVS) and users need the High Velocity Sales User or High Velocity Sales Cadence Creator permission set. This field value includes emails sent via the ListEmail object or HVS sales cadences.
`TotalOpens`	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort

Field	Details
	Description Read-only. The total number of times a prospect's email client loaded the images in the HTML version of the email. We also record an open if the prospect clicks a link within the HTML or text email without downloading images. A click indicates that they viewed the message. Some email clients (Outlook, Apple Mail, Thunderbird) do not display images by default. Pardot counts an open each time the images load. This field is available in API version 46.0 and later. To access this field, your org must use High Velocity Sales (HVS) and users need the High Velocity Sales User or High Velocity Sales Cadence Creator permission set. This field value includes emails sent via the ListEmail object or HVS sales cadences.
`TotalSent`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Read-only. The total number of emails sent, including bounced, opted-out, and invalid To: addresses. This field is available in API version 46.0 and later. To access this field, your org must use High Velocity Sales (HVS) and users need the High Velocity Sales User or High Velocity Sales Cadence Creator permission set. This field value includes emails sent via the ListEmail object or HVS sales cadences.
`TotalSoftBounced`	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** Read-only. The total number of times a recipient's mail server acknowledged the email, but returned it to the sender. Sometimes it is because the recipient's mailbox is full or the mail server is temporarily unavailable. A soft bounce message can sometimes be deliverable at another time. After 5 soft bounces, Pardot opts the prospect out of emails. This field is available in API version 46.0 and later. To access this field, your org must use High Velocity Sales (HVS) and users need the High Velocity Sales User or High Velocity Sales Cadence Creator permission set. This field value includes emails sent via the ListEmail object or HVS sales cadences.
`UIType`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update

Field	Details
	Description Indicates the user interface where this template is usable. Possible values are: • `Aloha` • `SFX` • `SFX_Sample`—SFXSample

Usage

To retrieve this object, issue a describe call on an object, which returns a query result for each activity since the object was created. You can't query these records.

SEE ALSO:

Attachment

EmailStatus

DocumentAttachmentMap

EmbeddedServiceDetail

Represents a metadata catalog object that exposes fields from the underlying Embedded Service setup objects defined in each EmbeddedServiceConfig deployment for guest users. Guest users don't have direct access to the Embedded Service setup objects. Available in API version 39.0 and later.

Supported SOAP Calls

`describeSObjects()`, `query()`

Supported REST HTTP Methods

`GET`

Fields

Field	Details
`AvatarImg`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description URL of the image used as the agent avatar image.
`ContrastInvertedColor`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Accent branding color used in the embedded component, displayed as a hexadecimal value. Changes made to this field in the API aren't reflected in the embedded component.
`ContrastPrimaryColor`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Value of the `ContrastPrimaryColor` field in the EmbeddedServiceBranding setup object.
`CustomMinimizedComponent`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The custom Aura component that's used for the minimized state for this Embedded Chat deployment.
`CustomPrechatComponent`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The custom Aura component that's used for the pre-chat page for this Embedded Chat deployment.
`DurableId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Developer name for the EmbeddedServiceConfig.

Field	Details
FieldServiceConfirmCardImg	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the image used for the confirmation card in embedded Appointment Management (beta).
FieldServiceHomeImg	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the image used for the home screen in embedded Appointment Management (beta).
FieldServiceLogoImg	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the logo used for the home screen in embedded Appointment Management (beta).
Font	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Font used in the chat text of the Embedded Chat window.
FontSize	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Font size for the embedded component. Possible values are: • Small • Medium • Large

Field	Details
HeaderBackgroundImg	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the image used for the header background in Embedded Chat. This field is removed in API version 49.0 and later. The header background image is no longer supported.
Height	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Height of the embedded component.
IsFieldServiceEnabled	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Specifies whether Field Service is enabled for this Embedded Service deployment (`true`) or not (`false`). Embedded Appointment Management is currently beta.
IsLiveAgentEnabled	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Specifies whether Chat is enabled for this Embedded Service deployment (`true`) or not (`false`).
IsOfflineCaseEnabled	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Specifies whether offline support is enabled for this Embedded Chat deployment (`true`) or not (`false`).
IsPrechatEnabled	**Type** boolean

Field	Details
	Properties Defaulted on create, Filter, Group, Sort **Description** Value of the `PrechatEnabled` field in the EmbeddedServiceLiveAgent setup object.
`IsQueuePositionEnabled`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Specifies whether queue position (displaying the customer's place in line while they wait for an agent) is enabled for this Embedded Chat deployment (`true`) or not (`false`).
`NavBarColor`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Value of the `NavBarColor` field in the EmbeddedServiceBranding setup object.
`NavBarTextColor`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** This field is used to set the text color for the header.
`OfflineCaseBackgroundImg`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the image used for the background for the offline support case form in Embedded Chat.
`PrechatBackgroundImg`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the image used for the background for the pre-chat form in Embedded Chat.

Field	Details
PrimaryColor	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Value of the `PrimaryColor` field in the EmbeddedServiceBranding setup object.
SecondaryColor	**Type** string **Properties** Filter, Group, Nillable Sort **Description** Value of the `SecondaryColor` field in the EmbeddedServiceBranding setup object.
SecondaryNavBarColor	**Type** string **Properties** Filter, Group, Nillable Sort **Description** This field is used to set the color of a secondary header.
ShouldHideAuthDialog	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Specifies whether the prompt that the customer log in again during a flow should be hidden (`true`) or not (`false`). When it's hidden, the customer is taken directly to your login page.
ShouldShowExistingAppointment	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Specifies whether to display a button on the home screen for customers to access their existing appointments (`true`) or not (`false`) for embedded Appointment Management (beta).
ShouldShowNewAppointment	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field	Details
	Description Specifies whether to display a button on the home screen for customers to create a new appointment (`true`) or not (`false`) for embedded Appointment Management (beta).
`Site`	**Type** string **Properties** Filter, Group, Nillable Sort **Description** Value of the `Site` field in the EmbeddedServiceConfig setup object.
`SmallCompanyLogoImg`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the logo image used with Embedded Chat.
`WaitingStateBackgroundImg`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the image used for the background image in Embedded Chat while the customer waits to be connected with a support agent.
`Width`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Width of the embedded component.

Note: Any changes you make to the image fields override what you've entered in Setup. We recommend setting your image URLs in Setup.

Employee

Represents an employee within a company or organization. This object is available in API version 48.0 and later. In API version 49.0 and later, this object supports reports, criteria-based sharing rules, and history tracking, plus you can exclude individual fields from custom page layouts.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()` `undelete()`, `update()`, `upsert()`

Special Access Rules

To access this object, you must be assigned a Workplace Command Center permission set license and the Provides access to Workplace Command Center features system permission.

Fields

Field	Details
`AboutMe`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Information about the employee, such as areas of interest or skills. Values can be provided on Employee's profile page. This field is available even if Chatter is disabled.
`AlternateEmail`	**Type** email **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The employee's alternate email address.
`Availability`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The employee's availability status. Possible values are: • `In The Office` • `Out Of Office` • `Out Sick` • `PTO` • `Volunteering Time Off` • `Working Remotely`

Field	Details
AvailabilityEndDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The end date of the Employee's availability, inclusive of the date.
AvailabilityStartDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The start date of the Employee's availability, inclusive of the date.
BannerPhotoUrl	**Type** url **Properties** Filter, Nillable, Sort **Description** Read only. The URL for the employee's banner photo. Available in API v51.0 and later.
CurrentWellnessStatus	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The employee's current wellness status. Possible values are: • Available To Work • Remote Work Only • Unavailable • Unknown
DateOfBirth	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The employee's date of birth.

Field	Details
Email	**Type** email **Properties** Create, Filter, Group, idLookup, Nillable, Sort, Update **Description** The employee’s email address. This field is unique within your organization.
EmployeeNumber	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. The employee's employment ID for the organization they were hired into. This field is unique within your organization.
EmployeeStatus	**Type** picklist **Properties** Create, Filter, Group, Sort, Update **Description** Required. The employee's current work status. Possible values are: • Active • Inactive • Leave • Terminated
EmploymentType	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The employee's full-time or part-time status. Possible values are: • Full-Time • Part-Time
FirstName	**Type** string

Field	Details
	Properties Create, Filter, Group, Sort, Update **Description** Required. The employee's first name.
FullPhotoUrl	**Type** url **Properties** Filter, Nillable, Sort **Description** Read only. The URL for the employee's profile photo. The URL is updated every time a photo is uploaded and reflects the most recent photo. If a newer photo has been uploaded, the URL returned for an older photo isn't guaranteed to return a photo. Query this field for the URL of the most recent photo. Available in API v51.0 and later.
Gender	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The employee's gender. Possible values are: • Female • Male • Non-Binary / Non-Conforming • Other • Prefer Not to State • Transgender Female • Transgender Male
HomeAddress	**Type** address **Properties** Filter, Nillable **Description** The employee's home address.
HomeCity	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description The city for the employee’s home address.
HomeCountry	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The county for the employee’s home address.
HomeGeocodeAccuracy	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The level of accuracy of an employee’s home address geographical coordinates compared with its physical address. A geocoding service typically provides this value based on the address’s latitude and longitude coordinates. Possible values are: • Address • Block • City • County • ExtendedZip • NearAddress • Neighborhood • State • Street • Unknown • Zip
HomeLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with HomeLongitude to specify the precise geolocation of the employee’s home address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
HomeLongitude	**Type** double

Field	Details
	Properties Create, Filter, Nillable, Sort, Update **Description** Used with HomeLatitude to specify the precise geolocation of the employee's home address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places.
HomePhone	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The employee's home phone number.
HomePostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The postal code for the employee's home address.
HomeState	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The state for the employee's home address.
HomeStreet	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street for the employee's home address.
IndividualId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A reference to the Individual record that this employee is assigned to.

Field	Details
InternalOrganizationUnitId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A reference to the InternalOrganizationUnit this employee is assigned to.
JobProfile	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The employee's job profile at the company.
LastName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. The employee's last name.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
LocationId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description A reference to the Location that this employee is assigned to.
`ManagerId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A reference to the Employee record of the employee's manager.
`MediumPhotoUrl`	**Type** url **Properties** Filter, Nillable, Sort **Description** Read only. The URL for the medium-sized employee's profile photo. The URL is updated every time a photo is uploaded and reflects the most recent photo. If a newer photo has been uploaded, the URL returned for an older photo isn't guaranteed to return a photo. Query this field for the URL of the most recent photo. Available in API v51.0 and later.
`MiddleName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The employee's middle name.
`Name`	**Type** string **Properties** Filter, Group, idLookup, Nillable, Sort **Description** A compound field of `Employee.FirstName`, `Employee.MiddleName`, and `Employee.LastName`.
`NameSuffix`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The employee's suffix.

Field	Details
`OutOfOfficeMessage`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The message portion of the employee availability. This message can provide reasons or details about the change in availability. The maximum length of this string is 40 characters.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the user who currently owns this record. Default value is the user logged in to the API to perform the create operation.
`PreferredFirstName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The name the employee prefers to be called.
`PreferredPronoun`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The employee's preferred pronoun. Possible values are: • `He/Him/His` • `Other/Ask Me` • `She/Her/Hers` • `They/Them/Theirs`
`RelatedPersonId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description Links an employee to a person account with a unique value. Reserved for future use. Don't edit it.
SmallPhotoUrl	**Type** url **Properties** Filter, Nillable, Sort **Description** Read only. The URL for the small-sized employee's profile photo. The URL is updated every time a photo is uploaded and reflects the most recent photo. If a newer photo has been uploaded, the URL returned for an older photo isn't guaranteed to return a photo. Query this field for the URL of the most recent photo. Available in API v51.0 and later.
StatusAsOf	**Type** dateTime **Properties** Create, Filter, Sort, Update **Description** Required. Start date of the employee's current status.
StatusEndDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Planned end date for the employee's status.
TimeZone	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The time zone which the employee's work hours fall within.
UserId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Lookup field to associate an Employee record with a user in the org. The field is optional and unique.

Field	Details
WorkPhone	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The employee's formatted work phone number including country code and extension.
WorkerType	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. The type of worker for the employee. Possible values are: • Alumnus • Contractor • Employee • Intern • Temporary
WorkingHoursEnd	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The end time of the employee's working hours.
WorkingHoursStart	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The start time of the employee's working hours.

Associated Objects

This object has the following associated objects. Unless noted, they're available in the same API version as this object.

EmployeeHistory (API version 49.0)
History is available for tracked fields of the object.

EmployeeOwnerSharingRule

Sharing rules are available for the object.

EmployeesShare (API version 49.0)

Sharing is available for the object.

SEE ALSO:

Workplace Command Center for Work.com Developer Guide: Extend Work.com with Custom Solutions

EmployeeCrisisAssessment

Represents a crisis assessment of an Employee. This object is available in API version 48.0 and later. In API version 49.0 and later, this object supports reports, criteria-based sharing rules, and history tracking, plus you can exclude individual fields from custom page layouts.

For Work.com, when an employee responds to a wellness survey, an EmployeeCrisisAssessment record is created based on an employee's answers.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

To access this object, you must be assigned a Workplace Command Center permission set license and the Provides access to Workplace Command Center features system permission.

Fields

Field	Details
`Assessment`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The employee's COVID-19 status at the time of the assessment. Possible values are: • `COVID-19 Immune or Recovered` • `COVID-19 No Symptoms` • `COVID-19 Symptoms or Exposed` • `COVID-19 Test Negative` • `COVID-19 Test Positive` • `Declined`

Field	Details
AssessmentDate	**Type** dateTime **Properties** Create, Filter, Sort, Update **Description** The date of the assessment. Required
AssessmentNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The assessment record number.
CrisisId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The Crisis that this assessment is associated with.
EmployeeId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Required. The Employee that this assessment is associated with.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort

Field	Details
	Description The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the user who currently owns this record. Default value is the user logged in to the API to perform the create operation.
`SourceAssessment`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The record in the source system that drove this assessment.
`SourceSystem`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The source system that drove this assessment.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

EmployeeCrisisAssessmentHistory (API version 49.0)
History is available for tracked fields of the object.

EmployeeCrisisAssessmentOwnerSharingRule
Sharing rules are available for the object.

EmployeeCrisisAssessmentShare (API version 49.0)
Sharing is available for the object.

SEE ALSO:

Workplace Command Center for Work.com Developer Guide: Extend Work.com with Custom Solutions

EngagementChannelType

Represents a channel through which a customer can be reached for communication. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`ContactPointType`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The contact point type of the channel. Possible values are: • `Email` • `MailingAddress` • `Phone` • `Social` • `Web`
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, it's possible that this record was referenced (`LastReferencedDate`) and not viewed.
`Name`	**Type** string

Field	Details
	Properties Create, Filter, Group, idLookup, Sort, Update **Description** Required. Name of the communication subscription consent record.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the account owner associated with this customer.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

EngagementChannelTypeFeed
Feed tracking is available for the object.

EngagementChannelTypeHistory
History is available for tracked fields of the object.

EngagementChannelTypeOwnerSharingRule
Sharing rules are available for the object.

EngagementChannelTypeShare
Sharing is available for the object.

EmbeddedServiceLabel

Represents a customized label in Embedded Chat or embedded Appointment Management.This object is available in API version 44.0 and later.

Supported SOAP Calls

`describeSObjects()`, `query()`

Supported REST HTTP Methods

`GET`

Fields

Field	Details
CustomLabelName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The developer name for the custom label.
DurableId	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The unique name containing `EmbeddedServiceConfig.labelKey`.
EmbeddedServiceConfigDeveloperName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Developer name for the EmbeddedServiceConfig.
LabelKey	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of label for this embedded component. The value corresponds to the label within a label group (substate of chat state or page type).

EnhancedLetterhead

Represents an enhanced letterhead that can be associated with a Lightning email template that doesn't use the Salesforce Merge Language (SML). This object is available in API version 46.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `describeLayout()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
Description	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of the contents of the header and footer.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date and time when this enhanced letterhead was last used.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date and time when this enhanced letterhead was last viewed.
LetterheadFooter	**Type** textarea **Properties** Create, Nillable, Update **Description** The contents of the enhanced letterhead's footer.
LetterheadHeader	**Type** textarea **Properties** Create, Nillable, Update **Description** The contents of the enhanced letterhead's header.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update

Field	Details
	Description The name of the enhanced letterhead, such as Standard Company Letterhead.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

EnhancedLetterheadFeed
Feed tracking is available for the object.

Entitlement

Represents the customer support an account or contact is eligible to receive. This object is available in API version 18.0 and later. Entitlements may be based on an asset, product, or service contract.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`AccountId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the Account associated with the entitlement.
`AssetId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Required. ID of the Asset associated with the entitlement. Must be a valid asset ID.
`BusinessHoursId`	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description Required. ID of the BusinessHours associated with the entitlement. Must be a valid business hours ID.
CasesPerEntitlement	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The total number of cases the entitlement supports. This field is only available if `IsPerIncident` is `true`.
ContractLineItemId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Required. ID of the ContractLineItem associated with the entitlement. Must be a valid ID.
EndDate	**Type** date **Properties** Create, Filter, Nillable, Update **Description** The last day the entitlement is in effect.
IsPerIncident	**Type** boolean **Properties** Defaulted on create, Filter, Update **Description** Indicates whether the entitlement is limited to supporting a specific number of cases (`true`) or not (`false`).
LastReferencedDate	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.

Field	Details
LastViewedDate	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (`LastReferencedDate`) but not viewed it.
Name	**Type** string **Properties** Create, Filter, Update **Description** Required. Name of the entitlement.
SvcApptBookingWindowsId	**Type** reference **Properties** Create, Filter, Group, Sort, Nillable, Update **Description** The operating hours that the entitlement's work orders should respect. The label in the user interface is `Operating Hours`. Available only if Field Service is enabled.
RemainingCases	**Type** int **Properties** Create, Filter, Nillable, Update **Description** The number of cases the entitlement can support. This field decreases in value by one each time a case is created with the entitlement. This field is only available if `IsPerIncident` is selected.
RemainingWorkOrders	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The number of agreed work orders remaining to be created.
ServiceContractId	**Type** reference

Field	Details
	Properties Create, Filter, Nillable, Update **Description** Required. ID of the ServiceContract associated with the entitlement. Must be a valid ID.
`SlaProcessId`	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the SlaProcess associated with the entitlement. This field is available in version 19.0 and later.
`StartDate`	**Type** date **Properties** Create, Filter, Nillable, Update **Description** The first date the entitlement is in effect.
`Status`	**Type** picklist **Properties** Filter, Nillable **Description** Status of the entitlement, such as `Expired`.
`SvcApptBookingWindows`	**Type** reference **Properties** Create, Filter, Group, Sort, Nillable, Update **Description** The operating hours of the entitlement. This field is visible only if Field Service is enabled.
`Type`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Nillable, Update **Description** The type of entitlement, such as Web or phone support.

Field	Details
WorkOrdersPerEntitlement	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Total number of work orders available for this entitlement.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

EntitlementFeed (API version 23.0)
Feed tracking is available for the object.

EntitlementHistory
History is available for tracked fields of the object.

SEE ALSO:
EntitlementContact
SlaProcess

EntitlementContact

Represents a Contact eligible to receive customer support via an Entitlement. This object is available in API version 18.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`

Fields

Field	Details
ContactId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the Contact associated with the entitlement. Must be a valid ID.

Field	Details
EntitlementId	**Type** reference **Properties** Create, Filter **Description** Required. ID of the Entitlement associated with the entitlement contact. Must be a valid ID.
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Nillable **Description** Required. Name of the entitlement contact.

Usage

Use to query and manage entitlement contacts.

SEE ALSO:

Entitlement

EntitlementTemplate

Represents predefined terms of customer support for a product (Product2). This object is available in API version 18.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Summer '20 and later, only Salesforce admins, users with access to the Case, Entitlement, or Work Order objects, and users with the View Setup and Configuration permission can access this object.

Fields

Field	Details
`BusinessHoursId`	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the BusinessHours associated with the entitlement template. Must be a valid business hours ID.
`CasesPerEntitlement`	**Type** int **Properties** Create, Filter, Nillable, Update **Description** The total number of cases the entitlement template supports. This field is only available if `IsPerIncident` is `true`.
`IsPerIncident`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Update **Description** Indicates whether the entitlement template is limited to supporting a specific number of cases (`true`) or not (`false`).
`Name`	**Type** string **Properties** Create, Filter, idLookup, Update **Description** Required. Name of the entitlement template.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix. Available in version 34.0 and later.
`SlaProcessId`	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the SlaProcess associated with the entitlement template. This field is available in API version 19.0 and later.
`Term`	**Type** int **Properties** Create, Defaulted on create, Filter, Nillable, Update **Description** Number of days that the entitlement template is valid.
`Type`	**Type** picklist **Properties** Create, Filter, Nillable, Update **Description** The type of entitlement template, such as Web or phone support.

Usage

Use this object to manage entitlement templates.

EntityHistory

Represents historical information about an object's changed field values. This object is only available to users with the "View All Data" permission. This object is unavailable beginning with API version 8.0. Use the object-specific Historyobjects instead.

Supported Calls

`describeSObjects()`, `getUpdated()`, `getDeleted()`, `query()`, `retrieve()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Fields

Field	Details
`FieldName`	**Type** picklist **Properties** Filter, Restricted picklist **Description** ID of the standard or custom field.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`NewValue`	**Type** anyType **Properties** Nillable **Description** New value of the modified field.
`OldValue`	**Type** anyType **Properties** Nillable **Description** Previous value of the modified field.

Field	Details
`ParentId`	**Type** reference **Properties** Filter **Description** ID of the object that contains the field.
`ParentSobjectType`	**Type** picklist **Properties** Filter, Restricted picklist **Description** The kind of object that contains the field.

Usage

In API version 7.0 and later, this object works with Case, Contract, and Solution objects:

- This object is always read-only in the online application.
- When a field is modified, this object records both the old and new field values. There are exceptions to this behavior for certain fields such as long text areas and multi-select picklists. These fields appear in this object to indicate that the field was changed, but the old and new values are not recorded.
- Two rows are added to this object when foreign key fields change. One row contains the foreign key object names that display in the online application. For example, "Jane Doe" is recorded as the name of a contact. The other row contains the actual foreign key ID that is only returned to and visible from the API.
- Up to a total of twenty fields (standard or custom) can be tracked for a given object.
- In the online application, you can specify which fields are tracked or not tracked at any time.
- As soon as tracking is turned on for a field, all changes to its value are recorded in the database.
- Turning off tracking for a field stops further changes from being recorded, but the history data is not deleted.
- Be advised that deleting a custom field also permanently deletes the history data for that custom field.

EntityMilestone

Represents a required step in a customer support process on a work order. The Salesforce user interface uses the term "object milestone." This object is available in API version 37.0 and later.

Note: Milestones on cases use the CaseMilestone object type.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`

Special Access Rules

- As of Summer '20 and later, only Salesforce admins, users with access to the Case, Entitlement, or Work Order objects, and users with the View Setup and Configuration permission can access this object.
- Entitlement management must be enabled.
- Work orders or Field Service must be enabled.

Fields

Field Name	Details
`ActualElapsedTimeInDays`	**Type** double **Properties** Filter, Nillable, Sort **Description** The number of days that it took to complete a milestone. (Elapsed Time) – (Stopped Time) = (Actual Elapsed Time) Note: To display this field, select **Enable stopped time and actual elapsed time** on the Entitlement Settings page and add the field to the object milestone page layout.
`ActualElapsedTimeInHrs`	**Type** double **Properties** Filter, Nillable, Sort **Description** The number of hours that it took to complete a milestone. (Elapsed Time) – (Stopped Time) = (Actual Elapsed Time) Note: To display this field, select **Enable stopped time and actual elapsed time** on the Entitlement Settings page and add the field to the object milestone page layout.
`ActualElapsedTimeInMins`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of minutes that it took to complete a milestone. (Elapsed Time) – (Stopped Time) = (Actual Elapsed Time) Note: To display this field, select **Enable stopped time and actual elapsed time** on the Entitlement Settings page and add the field to the object milestone page layout.

Field Name	Details
BusinessHoursId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The business hours on the milestone. If business hours aren't specified, the entitlement process business hours are used. If business hours are also not specified on the entitlement process, the business hours on the record are used.
CompletionDate	**Type** dateTime **Properties** Filter, Nillable, Sort, Update **Description** The date and time the milestone was completed.
CurrencyIsoCode	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only for orgs with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization.
ElapsedTimeInDays	**Type** double **Properties** Filter, Nillable, Sort **Description** The number of days it took to complete a milestone, including time during which the milestone was stopped. Automatically calculated to include the business hours on the record. Elapsed time is calculated only after the Completion Date field is populated. (Elapsed Time) – (Stopped Time) = (Actual Elapsed Time).
ElapsedTimeInHrs	**Type** double **Properties** Filter, Nillable, Sort **Description** The number of hours it took to complete a milestone, including time during which the milestone was stopped. Automatically calculated to include the

Field Name	Details
	business hours on the record. Elapsed time is calculated only after the Completion Date field is populated. (Elapsed Time) – (Stopped Time) = (Actual Elapsed Time).
`ElapsedTimeInMins`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of minutes it took to complete a milestone, including time during which the milestone was stopped. Automatically calculated to include the business hours on the record. Elapsed time is calculated only after the Completion Date field is populated. (Elapsed Time) – (Stopped Time) = (Actual Elapsed Time).
`IsCompleted`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Icon ( ) that indicates a milestone completion.
`IsViolated`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Icon ( ) that indicates a milestone violation.
`MilestoneTypeId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the milestone (for instance, First Response).
`Name`	**Type** string **Properties** Filter, Group, Sort, Update **Description** The name of the milestone.

Field Name	Details
ParentEntityId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the record—for example, a work order—that contains the milestone.
SlaProcessId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The entitlement process associated with the milestone.
StartDate	**Type** dateTime **Properties** Filter, Nillable, Sort, Update **Description** The date and time that milestone tracking started.
StoppedTimeInDays	**Type** double **Properties** Filter, Nillable, Sort **Description** The number of days that an agent has been blocked from completing a milestone. For example, an agent may be waiting for a customer to reply with more information. Note: To display this field, select **Enable stopped time and actual elapsed time** on the Entitlement Settings page and add the field to the object milestone page layout.
StoppedTimeInHrs	**Type** double **Properties** Filter, Nillable, Sort **Description** The number of hours that an agent has been blocked from completing a milestone. For example, an agent may be waiting for a customer to reply with more information.

Field Name	Details
	Note: To display this field, select **Enable stopped time and actual elapsed time** on the Entitlement Settings page and add the field to the object milestone page layout.
`StoppedTimeInMins`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of minutes that an agent has been blocked from completing a milestone. For example, an agent may be waiting for a customer to reply with more information. Note: To display this field, select **Enable stopped time and actual elapsed time** on the Entitlement Settings page and add the field to the object milestone page layout.
`TargetDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time to complete the milestone.
`TargetResponseInDays`	**Type** double **Properties** Filter, Nillable, Sort **Description** The number of days to complete the milestone. Automatically calculated to include the business hours on the record.
`TargetResponseInHrs`	**Type** double **Properties** Filter, Nillable, Sort **Description** The number of hours to complete the milestone. Automatically calculated to include the business hours on the record.
`TargetResponseInMins`	**Type** int

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The number of minutes to complete the milestone. Automatically calculated to include the business hours on the record.
`TimeRemainingInDays`	**Type** string **Properties** Filter, Nillable, Sort **Description** The days that remain before a milestone violation. Automatically calculated to include the business hours on the record.
`TimeRemainingInHrs`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The hours that remain before a milestone violation. Automatically calculated to include the business hours on the record.
`TimeRemainingInMins`	**Type** string **Properties** Group, Nillable, Sort **Description** The minutes that remain before a milestone violation. Automatically calculated to include the business hours on the record.
`TimeSinceTargetInDays`	**Type** string **Properties** Filter, Nillable, Sort **Description** The days that have elapsed since a milestone violation. Automatically calculated to include the business hours on the record.
`TimeSinceTargetInHrs`	**Type** string **Properties** Filter, Nillable, Sort

Field Name	Details
	Description The hours that have elapsed since a milestone violation. Automatically calculated to include the business hours on the record.
`TimeSinceTargetInMins`	**Type** string **Properties** Group, Nillable, Sort **Description** The minutes that have elapsed since a milestone violation. Automatically calculated to include the business hours on the record.

Usage

When you create an entitlement process, you select its type based on the type of record that you want the process to run on: Case or Work Order. Processes created before Summer '16 use the Case type. When a Work Order entitlement process runs on a work order, the resulting milestones on the work order are object milestones. Conversely, when a Case entitlement process runs on a case, the resulting milestones are case milestones, a separate standard object.

Tip: If an entitlement has an entitlement process associated with it, don't use the entitlement for multiple types of support records. An entitlement process works only on records that match the process's type. For example, when a Case entitlement process is applied to an entitlement, the process runs only on cases associated with that entitlement. If a work order is also associated with the entitlement, the process doesn't run on the work order. To ensure that the milestones you set up work as expected, associate a customer's work orders and cases with different entitlements.

Customize page layouts, validation rules, and more for object milestones from the Object Milestones node in Setup under Entitlement Management.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

EntityMilestoneFeed
Feed tracking is available for the object.

EntityMilestoneHistory
History is available for tracked fields of the object.

EntitySubscription

Represents a subscription for a user following a record or another user. This object is available in API version 34.0 and later.

A user can subscribe to a record or to another user. Changes to the record and updates from the users are displayed in the Chatter feed on the user's home page, which is a useful way to stay up-to-date with other users and with changes made to records in Salesforce. Feeds are available in API version 18.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`NetworkId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the Experience Cloud site where the user is following the record or user. This field is available in API version 26.0 and later, if digital experiences is enabled for your org.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the record or user which the user is following.
`SubscriberId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the user who is following the record or user.

Usage

Consider this when following records and users:

- Users can only follow records that they can see.
- Users can see which records other users are following, unless they don't have access to the records.
- Administrators and users with the "Modify All Users" permission can configure a user to follow records that the user has read access to.
- Administrators and users with the "Modify All Users" permission can configure users to stop following records.
- Following topics is available in API version 29.0 and later. For this reason, a topic ID is now a supported value for the `ParentId` field.
- If you deactivate a user, any EntitySubscription where the user is associated with the ParentId or SubscriberId field, meaning all subscriptions both to and from the user, are soft deleted. If the user is reactivated, the subscriptions are restored. However, if you

deactivate multiple users at once and these users follow each other, their subscriptions are hard deleted. In this case, the user-to-user EntitySubscription is deleted twice (double deleted). Such subscriptions can't be restored upon user reactivation.

When using `query()` with EntitySubscription,

- Note the following SOQL restriction. No SOQL limit if logged-in user has "View All Data" permission. If not, specify a LIMIT clause of 1,000 records or fewer.
- A query using a `WHERE` clause can only filter by fields on the EntitySubscription object.
- If user sharing is enabled and the querying user is not an administrator, a SOQL query must be constrained either by the `ParentId` or `SubscriberId`. Otherwise, the query behavior at run time is undefined, meaning the result set can be incomplete or inconsistent from invocation to invocation. For an unconstrained query, the sharing check limits imposed on a non-adminstrative user are likely to be exceeded before the query completes, because access checks are run against both parent and subject, for each row of the result set. We recommend using the Connect REST API to query EntitySubscription data instead of running a SOQL query.
- Users without the "View All Data" permission
  - Need read access on the object associated with the `ParentId` field to see which users are following records for the object.
  - Can use an `ORDER BY` clause in a query only to order by fields on the EntitySubscription object. For example, if the subscription relates to an Account record, the query can `ORDER BY ParentId`, but it can't `ORDER BY Account.Name`.
  - Don't always get all matching subscriptions when running a query. For these users, a query evaluates visibility criteria on a maximum of 500 records to reduce the prospect of long-running queries. If a user runs a query to see the CEO's subscriptions, it might scan a large number of records. The query only returns matches within the first 500 records scanned. It is possible that there are more subscriptions that are visible to the user, but they are not returned. To mitigate this, we recommend using a `WHERE` clause, if possible, to reduce the scope of the query.

Sample—SOQL

The following SOQL query returns subscriptions for all the accounts that a subscriber is following that have more than 10 employees:

```
SELECT Id
FROM EntitySubscription
WHERE SubscriberId = '005U0000000Rg2CIAS'
AND ParentId IN (
  SELECT Id FROM Account
  WHERE NumberOfEmployees > 10
)
LIMIT 200
```

SEE ALSO:

Custom Object__Feed

EnvironmentHubMember

Represents a member organization in the Environment Hub. This object is available in API version 29.0 and later.

Note: You can only create 20 member orgs per day. If you need to create additional orgs, log a case in the Partner Community.

Supported Calls

`delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Nillable, Update **Description** A brief description of this org.
`DisplayName`	**Type** string **Properties** Filter, Group, Nillable,Sort, Update **Description** The name that the user has specified for this member org.
`EnvironmentHubId`	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** The Org ID of this member's Environment Hub org.
`Instance`	**Type** String **Properties** Filter, Group, Nillable, Sort **Description** Name of the instance where the Environment Hub member org resides.
`IsFedIdSsoMatchAllowed`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort, Update **Description** Indicates if single sign-on has been enabled based on matching Federation ID. The default value is `false`.

Field Name	Details
IsSandbox	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort, Update **Description** Indicates if the member org is a sandbox (`true`) or not (`false`). This field is available in API version 36.0 and later.
MemberEntity	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The unique Org ID of the member org for this record.
MemberType	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of member org for this record. Possible values include `Branch Org`, `Patch Org`, `Release Org`, `Sandbox Org`, `Trialforce Management Org`, and `Trialforce Source Org`. Note: Only one member type at a time is stored. Member type is determined according to this hierarchy: (1) Sandbox, (2) Release, (3) Trialforce Source Org (TSO), (4) Patch, (5) Branch, and (6) Trialforce Management Org (TMO). For example, if an org is both a sandbox and a TMO, the value of `MemberType` is `Sandbox Org`.
Name	**Type** string **Properties** Defaulted on create, Filter, idLookup, Sort **Description** The name of the member org for this record.
OrgEdition	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The org’s edition, for example, Enterprise Edition or Unlimited Edition.

Field Name	Details
OrgStatus	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The licensing or creation status of this org. Possible values include `Active`, `Demo`, `Deleted`, `Free`, `Inactive`, and `Trial`.
Origin	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The method by which this org was added to the Environment Hub. Possible values are `autoDiscovered`, `userAdded`, and `provisioned`.
SSOMappedUsers	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The total number of mapped users in this member org. This field is available in API version 36.0 and later.
ServiceProviderId	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** The ID of the service provider for this member org. This field is available in API version 36.0 and later.
ShouldAddRelatedOrgs	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Status of the connection of related orgs to the hub. Possible values are `done`, `notRequested`, `pending`, and `requested`.
ShouldEnableSSO	**Type** boolean

Field Name	Details
	Properties Defaulted on create, Filter, Group, Sort, Update **Description** If SSO should be enabled when this member org is added. The default value is `false`.
`SsoStatus`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Sort, Update **Description** If single sign-on has been enabled for this org. Possible values are: • `Enabled`—Single sign-on is enabled. • `Disabled`—Single sign-on is disabled. • `Pending`—Single sign-on is in the process of being enabled. • `Failed`—Single sign-on enablement failed. Contact Salesforce support for assistance.
`SsoUsernameFormula`	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** The custom formula for matching users in the hub and member orgs.

Usage

Use this object to access and modify settings of member orgs in the Environment Hub.

Event

Represents an event in the calendar. In the user interface, event and task records are collectively referred to as activities.

Note:

- An EventRelation object can't be related to a child event, and child events don't include the invitee related list.
- `query()`, `delete()`, and `update()` aren't allowed with events related to more than one contact in API versions 25.0 and earlier.
- `create()` and `update()` aren't available for read-only fields on Lightning Experience event series.
- `upsert()` and `undelete()` aren't supported for syncing changes made to events through the API using the feature Lightning Sync.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`AcceptedEventInviteeIds`	**Type** JunctionIdList **Properties** Create, Update **Description** A string array of contact or lead IDs who accepted this event. This `JunctionIdList` is linked to the `AcceptedEventRelation` child relationship. Warning: Adding a `JunctionIdList` field name to the `fieldsToNull` property deletes all related junction records. This action can't be undone.
`AccountId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Represents the ID of the related account. The `AccountId` is determined as follows. If the value of `WhatId` is any of the following objects, then Salesforce uses that object's `AccountId`. • Account • Opportunity • Contract • Custom object that is a child of Account If the value of the `WhatId` field is any other object, and the value of the `WhoId` field is a contact object, then Salesforce uses that contact's `AccountId`. (If your org uses Shared Activities, Salesforce uses the `AccountId` of the primary contact.) Otherwise, Salesforce sets the value of the `AccountId` field to `null`. For information on IDs, see ID Field Type.
`ActivityDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description Contains the event's due date if the `IsAllDayEvent` flag is set to `true`. This field is a date field with a timestamp that is always set to midnight in the Coordinated Universal Time (UTC) time zone. Don't attempt to alter the timestamp to account for time zone differences. Label is **Due Date Only**. This field is required in versions 12.0 and earlier if the `IsAllDayEvent` flag is set to `true`. The value for this field and `StartDateTime` must match, or one of them must be `null`.
`ActivityDateTime`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Contains the event's due date if the `IsAllDayEvent` flag is set to `false`. The time portion of this field is always transferred in the Coordinated Universal Time (UTC) time zone. Translate the time portion to or from a local time zone for the user or the application, as appropriate. Label is **Due Date Time**. This field is required in versions 12.0 and earlier if the `IsAllDayEvent` flag is set to `false`. The value for this field and `StartDateTime` must match, or one of them must be `null`.
`ClientGuid`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The client globally unique identifier identifies the external API client used to create the event. Label is **Client GUID**.
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization.
`DeclinedEventInviteeIds`	**Type** JunctionIdLIst **Properties** Create, Update

Field	Details
	Description A string array of contact, lead, or user IDs who declined this event. This `JunctionIdList` is linked to the `DeclinedEventRelation` child relationship. Warning: Adding a `JunctionIdList` field name to the `fieldsToNull` property deletes all related junction records. This action can't be undone.
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** Contains a text description of the event. Limit: 32,000 characters.
`Division`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** A logical segment of your organization's data. For example, if your company is organized into different business units, you could create a division for each business unit, such as "North America," "Healthcare," or "Consulting." Available only if the organization has the Division permission enabled.
`DurationInMinutes`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Contains the event length, in minutes. Even though this field represents a temporal value, it's an integer type—not a Date/Time type. Required in versions 12.0 and earlier if `IsAllDayEvent` is false. In versions 13.0 and later, this field is optional, depending on the following: • If `IsAllDayEvent` is true, you can supply a value for either `DurationInMinutes` or `EndDateTime`. Supplying values in both fields is allowed if the values add up to the same amount of time. If both fields are `null`, the duration defaults to one day. • If `IsAllDayEvent` is false, a value must be supplied for either `DurationInMinutes` or `EndDateTime`. Supplying values in both fields is allowed if the values add up to the same amount of time. If the multiday event feature is enabled, then API versions 13.0 and later support values greater than 1440 for the `DurationInMinutes` field. API versions 12.0 and earlier can't access event objects whose `DurationInMinutes` is greater than 1440. For more information, see **Multiday Events**.

Field	Details
	Depending on your API version, errors with the `DurationInMinutes` and `EndDateTime` fields may appear in different places. • Versions 38.0 and before—Errors always appear in the `DurationInMinutes` field. • Versions 39.0 and later—If there's no value for the `DurationInMinutes` field, errors appear in the `EndDateTime` field. Otherwise, they appear in the `DurationInMinutes` field.
`EndDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Read-only. Available in versions 46.0 and later. This field supplies the date value that appears in the EndDateTime field. This field is a date field with a timestamp that is always set to midnight in the Coordinated Universal Time (UTC) time zone.
`EndDateTime`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Available in versions 13.0 and later. The time portion of this field is always transferred in the Coordinated Universal Time (UTC) time zone. Translate the time portion to or from a local time zone for the user or the application, as appropriate. This field is optional, depending on the following: • If `IsAllDayEvent` is true, you can supply a value for either `DurationInMinutes` or `EndDateTime`. Supplying values in both fields is allowed if the values add up to the same amount of time. If both fields are `null`, the duration defaults to one day. • If `IsAllDayEvent` is false, a value must be supplied for either `DurationInMinutes` or `EndDateTime`. Supplying values in both fields is allowed if the values add up to the same amount of time. Depending on your API version, errors with the `DurationInMinutes` and `EndDateTime` fields may appear in different places. • Versions 38.0 and before—Errors always appear in the `DurationInMinutes` field. • Versions 39.0 and later—If there's no value for the `DurationInMinutes` field, errors appear in the `EndDateTime` field. Otherwise, they appear in the `DurationInMinutes` field.
`EventSubtype`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort

Field	Details
	Description Provides standard subtypes to facilitate creating and searching for events. This field isn't updateable.
EventWhoIds	**Type** JunctionIdList **Properties** Create, Update **Description** A string array of contact or lead IDs used to create many-to-many relationships with a shared event. `EventWhoIds` is available when the shared activities setting is enabled. The first contact or lead ID in the list becomes the primary `WhoId` if you don't specify a primary `WhoId`. If you set the `EventWhoIds` field to null, all entries in the list are deleted and the value of `WhoId` is added as the first entry. Warning: Adding a `JunctionIdList` field name to the `fieldsToNull` property deletes all related junction records. This action can't be undone.
GroupEventType	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Read-only. Available in API versions 19.0 and later. The possible values are: • `0` (Non–group event)—An event with no invitees. • `1` (Group event)—An event with invitees. • `2` (Proposed event)—An event created when a user requests a meeting with a contact, lead, or person account using the Salesforce user interface. When the user confirms the meeting, the proposed event becomes a group event. You can't create, edit, or delete proposed events in the API. This value is no longer used in API version 41.0 and later. • `3` (IsRecurrence2 Series Pattern)—An event representing an event series recurrence pattern in Lightning Experience.
IsAllDayEvent	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the `ActivityDate` field (`true`) or the `ActivityDateTime` field (`false`) is used to define the date or time of the event. Label is **All-Day Event**. See also `DurationInMinutes` and `EndDateTime`.

Field	Details
IsArchived	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the event has been archived.
IsChild	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the event is a child of another event (`true`) or not (`false`). For a child event, you can update `IsReminderSet` and `ReminderDateTime` only. You can query and delete a child event. If the objects related to the child event are different from those objects related to the parent event (this difference is possible if you use API version 25.0 or earlier) and one of the objects related to the child event is deleted, the objects related to the parent event are updated to ensure data integrity.
IsClientManaged	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the event is managed by an external client. If the value of this field is false, the event isn't owned or managed by an external client, and Salesforce can be used to update it. If the value is true, Salesforce can be used to change only noncritical fields on the event. Label is **Is Client Managed**.
IsGroupEvent	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the event is a group event—that is, whether it has invitees (`true`) or not (`false`).
IsPrivate	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description Indicates whether users other than the creator of the event can (`false`) or can't (`true`) see the event details when viewing the event user's calendar. However, users with the View All Data or Modify All Data permission can see private events in reports and searches, or when viewing other users' calendars. Private events can't be associated with opportunities, accounts, cases, campaigns, contracts, leads, or contacts. Label is **Private**.
`IsRecurrence`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Indicates whether a Salesforce Classic event is scheduled to repeat itself (`true`) or only occurs one time (`false`). This field is read-only when updating records, but not when creating them. If this field value is `true`, then `RecurrenceEndDateOnly`, `RecurrenceStartDateTime`, `RecurrenceType`, and any recurrence fields associated with the given recurrence type must be populated. Label is **Create recurring series of events**.
`IsRecurrence2`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Read-only. This field available in API version 44.0 and later. Indicates whether a Lightning Experience event is scheduled to repeat (`true`) or only occurs one time (`false)`. If this field value is true, then `Recurrence2PatternText` and `Recurrence2PatternVersion` must be populated. Label is **Repeat**.
`IsRecurrence2Exception`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Read-only. This field available in API version 44.0 and later. Indicates whether an individual event in a Lightning Experience event series has a recurrence pattern that's different from the rest of the series, making it an exception.
`IsRecurrence2Exclusion`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field	Details
	Description Read-only. This field available in API version 44.0 and later. Indicates when updates to a Lightning Experience event series recurrence pattern have been made, but affect future event occurrences only. For past event occurrences, `IsRecurrence2Exclusion` is set to `true`, excluding past occurrences from the series recurrence pattern.
`IsReminderSet`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the activity is a reminder (`true`) or not (`false`).
`IsVisibleInSelfService`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether an event associated with an object can be viewed in the Customer Portal (`true`) or not (`false`). If your org has enabled digital experiences, events marked `IsVisibleInSelfService` are visible to any external user in the Experience Cloud site, as long as the user has access to the record the event was created on. This field is available when • Customer Portal or partner portal are enabled OR • Digital experiences is enabled and you have Customer Portal or partner portal licenses
`Location`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Contains the location of the event.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Contains the ID of the user or public calendar who owns the event. Label is **Assigned to ID**.

Field	Details
`Recurrence2PatternStartDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Read-only. This field available in API version 44.0 and later. Indicates the date and time when the Lightning Experience event series begins. The time portion of this field is always transferred in the Coordinated Universal Time (UTC) time zone. Translate the time portion to or from a local time zone for the user or the application, as appropriate.
`Recurrence2PatternText`	**Type** textarea **Properties** Nillable **Description** Read-only. This field available in API version 44.0 and later. Indicates the recurrence pattern for Lightning Experience event series. `Recurrence2PatternText` is implemented with RFC 5545 standard specifications for internet calendaring and scheduling. See Event Series section in this topic for usage examples. This field has a maximum length of 512 characters.
`Recurrence2PatternTimeZone`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** This field available in API version 44.0 and later. Indicates the time zone in which the Lightning Experience event series was created or updated. This field uses standard Java TimeZone IDs. For example, America/Los_Angeles.
`Recurrence2PatternVersion`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort, **Description** Read-only. This field available in API version 44.0 and later. Indicates the standard specifications for Lightning Experience event series recurrence patterns. The only possible value is `1` (RFC 5545 v4 RRULE)—RFC 5545 is a standard set of specifications for internet calendaring and scheduling that `IsRecurrence2` adheres to for series recurrence patterns. RFC 5545 specifications for series recurrence patterns are called rrules. For examples of rrule usage, see the Event Series section in this topic.

Field	Details
`RecurrenceActivityId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Read-only. Not required on create. Contains the ID of the main record of the Salesforce Classic recurring event. Subsequent occurrences have the same value in this field.
`RecurrenceDayOfMonth`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates the day of the month on which the event repeats.
`RecurrenceDayOfWeekMask`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates the day or days of the week on which the Salesforce Classic recurring event repeats. This field contains a bitmask. The values are as follows: • Sunday = `1` • Monday = `2` • Tuesday = `4` • Wednesday = `8` • Thursday = `16` • Friday = `32` • Saturday = `64` Multiple days are represented as the sum of their numerical values. For example, Tuesday and Thursday = 4 + 16 = 20.
`RecurrenceEndDateOnly`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates the last date on which the event repeats. For multiday Salesforce Classic recurring events, this date is the day on which the last occurrence starts. This field is a date field with a timestamp that is always set to midnight in the Coordinated Universal Time (UTC) time zone. Don't attempt to alter the timestamp to account for time zone differences.

Field	Details
RecurrenceInstance	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates the frequency of the Salesforce Classic event's recurrence. For example, `2nd` or `3rd`.
RecurrenceInterval	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates the interval between Salesforce Classic recurring events.
RecurrenceMonthOfYear	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates the month in which the Salesforce Classic recurring event repeats.
RecurrenceStartDateTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Indicates the date and time when the Salesforce Classic recurring event begins. The value must precede the `RecurrenceEndDateOnly`. The time portion of this field is always transferred in the Coordinated Universal Time (UTC) time zone. Translate the time portion to or from a local time zone for the user or the application, as appropriate.
RecurrenceTimeZoneSidKey	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates the time zone associated with a Salesforce Classic recurring event. For example, "UTC-8:00" for Pacific Standard Time.
RecurrenceType	**Type** picklist

Field	Details
	Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates how often the Salesforce Classic event repeats. For example, daily, weekly, or every nth month (where “nth” is defined in `RecurrenceInstance`).
`ReminderDateTime`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Represents the time when the reminder is scheduled to fire, if `IsReminderSet` is set to `true`. If `IsReminderSet` is set to `false`, then the user may have deselected the reminder checkbox in the Salesforce user interface, or the reminder has already fired at the time indicated by the value.
`ShowAs`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates how this event appears when another user views the calendar: Busy, Out of Office, or Free. Label is **Show Time As**.
`StartDateTime`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Indicates the start date and time of the event. Available in versions 13.0 and later. If the Event `IsAllDayEvent` flag is set to true (indicating that it’s an all-day Event), then the event start date information is contained in the `StartDateTime` field. The time portion of this field is always transferred in the Coordinated Universal Time (UTC) time zone. Translate the time portion to or from a local time zone for the user or the application, as appropriate. If the Event `IsAllDayEvent` flag is set to false (indicating that it isn’t an all-day event), then the event start date information is contained in the `StartDateTime` field. The time portion is always transferred in the Coordinated Universal Time (UTC) time zone. You need to translate the time portion to or from a local time zone for the user or the application, as appropriate. If this field has a value, then `ActivityDate` and `ActivityDateTime` must either be `null` or match the value of this field.

Field	Details
Subject	**Type** combobox **Properties** Create, Filter, Nillable, Sort, Update **Description** The subject line of the event, such as Call, Email, or Meeting. Limit: 255 characters.
Type	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates the event type, such as Call, Email, or Meeting.
UndecidedEventInviteeIds	**Type** JunctionIdList **Properties** Create, Update **Description** A string array of contact, lead, or user IDs who are undecided about this event. This `JunctionIdList` is linked to the `UndecidedEventRelation` child relationship. Warning: Adding a `JunctionIdList` field name to the `fieldsToNull` property deletes all related junction records. This action can't be undone.
WhatCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Available if your organization has enabled Shared Activities. Represents the count of related EventRelations pertaining to the `WhatId`. The count of the `WhatId` must be *1* or less.
WhatId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The `WhatId` represents nonhuman objects such as accounts, opportunities, campaigns, cases, or custom objects. `WhatId`s are polymorphic. Polymorphic means a `WhatId` is equivalent to the ID of a related object. The label is `Related To ID`.

Field	Details
`WhoCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Available to organizations that have Shared Activities enabled. Represents the count of related EventRelations pertaining to the `WhoId`.
`WhoId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The WhoId represents a human such as a lead or a contact. WhoIds are polymorphic. Polymorphic means a WhoId is equivalent to a contact's ID or a lead's ID. The label is `Name ID`. If Shared Activities is enabled, the value of this field is the ID of the related lead or primary contact. If you add, update, or remove the WhoId field, you might encounter problems with triggers, workflows, and data validation rules that are associated with the record. The label is `Name ID`. If the `JunctionIdList` field is used, all `WhoIds` are included in the relationship list. Beginning in API version 37.0, if the contact or lead ID in the `WhoId` field isn't in the `EventWhoIds` list, no error occurs and the ID is added to the `EventWhoIds` as the primary `WhoId`. If `WhoId` is set to null, an arbitrary ID from the existing `EventWhoIds` list is promoted to the primary position.

Usage

Use Event to manage calendar appointments.

Querying and Filtering Events

Queries on events are denied before they time out if they involve amounts of data that are deemed too large. In such cases, the exception code `OPERATION_TOO_LARGE` is returned. If you receive `OPERATION_TOO_LARGE`, refactor your query to return or scan a smaller amount of data.

When querying for events with a specific due date, you must filter on both the `ActivityDateTime` and `ActivityDate` fields. For example to find all events with a due date of February 14, 2003, you need two filters:

- One filter with the `ActivityDate` field equal to the Coordinated Universal Time (UTC) time zone on February 14, 2003.
- One filter with the `ActivityDateTime` field greater than or equal to midnight on February 14, 2003 in the user's local time zone AND less than or equal to midnight on February 15, 2003 in the user's local time zone.

Alternatively, in version 13.0 and later, you can find events with a specific due date by filtering on `StartDateTime`. For example, to find all events with a due date of February 14, 2003, filter with the `StartDateTime` greater than or equal to midnight on February 14, 2003 in the user's local time zone AND less than or equal to midnight on February 15, 2003 in the user's local time zone.

The `EventId` field of an EventRelation object always points to the master record. An invitee on a group event can query the EventRelation object to view the master record.

Multiday Events

- Multiday events are available in version 13.0 and later. Also, in earlier versions SOQL queries don't return multiday events.
- Multiday events are enabled through the user interface from Setup by entering *`Activity Settings`* in the `Quick Find` box, then selecting **Activity Settings**.
- If the multiday event feature is enabled, then API versions 13.0 and later support values greater than 1440 for the `DurationInMinutes` field. API versions 12.0 and earlier can't access event objects whose `DurationInMinutes` is greater than 1440.
- Multiday events can't exceed 14 days.

Event Series and Recurring Events

In Lightning Experience, events with multiple occurrences are called event series, and are indicated when the `IsRecurrence2` field is set to `true`. In Salesforce Classic, events with multiple occurrences are called recurring events, and are indicated when the `IsRecurrence` field is set to `true`. Both fields can't be set to true for the same event.

- Lightning Experience event series are available in API version 44.0 and later as read-only fields. Salesforce Classic recurring events are available in version 7.0 and later. In earlier versions, SOQL queries don't return any Lightning Experience event series.
- After an event is created, you can't change the values of `IsRecurrence2` or `IsRecurrence` from `true` to `false` or vice versa.
- You can't set fields associated with `IsRecurrence2` for events where `IsRecurrence` is set to `true`, or vice versa.
- For Lightning Experience event series where `IsRecurrence2` is `true`, if you'd like to delete a single or all remaining events, use the REST API call. For Salesforce Classic recurring events where `IsRecurrence` is `true`, all past and future events in the series are removed when you delete the recurring event series through the API. However, when you delete the recurring event series through the user interface, only future occurrences are removed.
- When creating a Salesforce Classic recurring event series, the duration of the event must be 24 hours or less. When the Salesforce Classic recurring event series is created, you can extend the length of individual occurrences beyond 24 hours if Multiday events are enabled; see **Multiday Events**.
- For Salesforce Classic recurring events, `RecurrenceStartDateTime`, `RecurrenceEndDateOnly`, `RecurrenceType`, and any properties associated with the given recurrence type (see the Recurrence Field Usage for Salesforce Classic Recurring Events table) must be populated.
- When updating a Salesforce Classic recurring event series, it's not possible to update the EventRelation for the event series object and the EventRelation for the series object occurrences at the same time.
- Lightning Experience event series have no series ID, so it's not possible to locate other occurrences in the series. In Salesforce Classic recurring events, you can use `RecurrenceActivityId` to locate other occurrences.
- For both Lightning Experience event series and Salesforce Classic recurring events, when a series repeats every day, month, or year, you can only schedule occurrences one time per day, month, or year. The every week option lets you schedule occurrences multiple days per week.

Limits for Lightning Experience event series and limits for Salesforce Classic recurring events also apply.

Recurrence patterns for Lightning Experience event series adhere to RFC 5545 standard specifications for internet calendaring and scheduling. RFC 5545 specifications for series recurrence patterns are called rrules. This table includes common rrule examples. Refer to RFC 5545 standards for additional specifications.

Recurrence Pattern	Rrule Example
Every day for 5 days	`RRULE:FREQ=DAILY;INTERVAL=1;COUNT=5`

Recurrence Pattern	Rrule Example
Every Monday, Tuesday, Wednesday, Thursday, and Friday with no end date	`RRULE:FREQ=WEEKLY;INTERVAL=1;BYDAY=MO,TU,WE,TH,FR`
Every 2 weeks on Monday and Friday for 10 occurrences	`RRULE:FREQ=WEEKLY;INTERVAL=2;BYDAY=MO,FR;WKST=SU;COUNT=10`
Monthly on the 1st of the month until January 1, 2020	`RRULE:FREQ=MONTHLY;INTERVAL=1;BYMONTHDAY=1;UNTIL=20200101T190000Z`
Yearly on July 1st for 3 occurrences (in this example, specify the date using StartDateTime)	`RRULE:FREQ=YEARLY;INTERVAL=1;BYMONTH=1;COUNT=3`

This table describes the usage of recurrence fields for Salesforce Classic recurring events. Each recurrence type must have all of its properties set. All unused properties must be set to null.

RecurrenceType Value	Properties	Example Pattern
RecursDaily	RecurrenceInterval	Every second day
RecursEveryWeekday	RecurrenceDayOfWeekMask	Every weekday - can't be Saturday or Sunday
RecursMonthly	RecurrenceDayOfMonth RecurrenceInterval	Every second month, on the third day of the month
RecursMonthlyNth	RecurrenceInterval RecurrenceInstance RecurrenceDayOfWeekMask	Every second month, on the last Friday of the month
RecursWeekly	RecurrenceInterval RecurrenceDayOfWeekMask	Every three weeks on Wednesday and Friday
RecursYearly	RecurrenceDayOfMonth RecurrenceMonthOfYear	Every March on the twenty-sixth day of the month
RecursYearlyNth	RecurrenceDayOfWeekMask RecurrenceInstanceRecurrenceMonthOfYear	The first Saturday in every October

Attendees, Invitees, and Resources

The field `GroupEventType` indicates that event participants are included on an event. You can add a resource to an event only when the resource is available. The only attendance status that can be assigned to resources is Accepted. Events can't be saved when resources you've added aren't available.

JunctionIdList

To create an event using `JunctionIdList`, IDs are pulled from the related contacts and both the event and the `EventRelation` records are created in one API call. If the `EventRelation` fails, the event is rolled back because it's all done in a single API call.

```
public void createEventNew(Contact[] contacts) {
 String[] contactIds = new String[contacts.size()];
 for (int i = 0; i < contacts.size(); i++) {
  contactIds[i] = contacts[i].getID();
 }
 Event event = new Event();
 event.setSubject("New Event");
 event.setEventWhoIds(contactIds);
```

```
 SaveResult[] results = null;
 try {
  results = connection.create(new Event[] {
   task
  });
 } catch (ConnectionException ce) {
  ce.printStackTrace();
 }
}
```

Syncing Events with Lightning Sync

Attendee statuses (Accepted or Maybe, Declined, or No Response) sync from Microsoft® Exchange or Google to Salesforce, but not from Salesforce to Exchange or Google. Be wary of creating API flows that update attendee status in Salesforce for users set up to sync both ways. Eventually the original Exchange or Google status overrides the update made in Salesforce.

Associated Objects

This object has the following associated objects. Unless otherwise noted, they're available in the same API version as this object.

EventFeed (API version 20.0)
Feed tracking is available for the object.

SEE ALSO:

Archived Activities

Object Basics

EventLogFile

Represents event log files for event monitoring. The event monitoring product gathers information about your Salesforce org's operational events, which you can use to analyze usage trends and user behavior. This object is available in API version 32.0 and later. The `Interval` and `Sequence` fields are available only in API version 37.0 and later.

You can interact with event monitoring data by querying fields on the EventLogFile object (like `EventType` and `LogDate`). `CreatedDate` tracks when the log file was generated. To view the underlying event data, query the `LogFile` field. The `EventType` determines the schema of this field. For more information, see EventLogFile Supported Event Types.

Note: Log data schema for each `EventType` can change. With each new release, use the `LogFileFieldNames` and `LogFileFieldTypes` fields to validate the schema changes. In the unlikely case in which no log files are generated for 24 hours, contact Salesforce Customer Support.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Special Access Rules

Accessing this object requires View Event Log Files and API Enabled user permissions. Users with View All Data permission can view event log files.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`ApiVersion`	**Type** double **Properties** Filter, Sort **Description** The specific API version for this log file. This field is available in API version 30.0 and later.
`EventType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The event type—API, Login, Report, URI, and so forth. Use to determine which files were generated for your org. For the corresponding `LogFile` schema, see EventLogFile Supported Event Types.
`Interval`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The generation schedule for the event log file. Possible values are: • `Daily` • `Hourly` This field is available in API version 37.0 and later.
`LogDate`	**Type** dateTime **Properties** Filter, Sort **Description** The date and time of the log file's creation. For daily event log files, tracks usage activity for a 24-hour period, from 12:00 a.m. to 11:59 p.m. UTC time. For hourly event log files, indicates the hour in which the log file was generated. For example, for events that occur between 11:00 AM and 12:00 PM on 3/7/2016, this field's value is 2016-03-07T11:00:00.000Z. Note: For hourly event log files, we recommend using `CreatedDate` to query the date and time that an EventLogFile object was created.

Field	Details
LogFile	**Type** base64 **Description** Encoded file data in .csv format. The EventType field defines the schema for this data.
LogFileContentType	**Type** string **Properties** Filter, Group, Sort **Description** The content type of the log file; always .csv.
LogFileFieldNames	**Type** string **Properties** Nillable **Description** The ordered list of fields in the log file data. Note: LogFileFieldNames and LogFileFieldTypes are specific to each EventType. For example, LogFileFieldNames has a different value for an API EventType and a Login EventType.
LogFileFieldTypes	**Type** string **Properties** Nillable **Description** The ordered list of field types in the log file data (String, Id, and so forth). Note: LogFileFieldNames and LogFileFieldTypes are specific to each EventType. For example, LogFileFieldTypes has a different value for an API EventType and a Login EventType.
LogFileLength	**Type** double **Properties** Filter, Sort **Description** The log file length in bytes. You can use this field to plan storage needs for your log files.
Sequence	**Type** int

Field	Details
	Properties Filter, Group, Sort **Description** The number for the portion of the event log file data captured in an hour. For 24-hour event log file generation, the value of this field is 0. For hourly event log files, the initial value is 1. This value increases by 1 when events are added in the same hour after the latest event log file is created. The value resets to 1 in the subsequent hour. For example, you have activity between 2:00 and 3:00 PM. Two-log files are generated that contain the event log data for that hour, with `Sequence` values of 1 and 2. For event log data that occurs at 3:01 PM, the `Sequence` value resets to 1. This field is available in API version 37.0 and later.

EventLogFile Supported Event Types
The `EventType` field in the EventLogFile object supports these events. Some common fields, such as `CPU_TIME` and `RUN_TIME`, can have null or zero values depending on how the events are generated for a given feature. Sometimes, three quotation marks appear around event data containing special characters in the CSV file. The third quotation mark is necessary for tools and applications to parse the field data at the correct field value boundary.

EventLogFile Supported Event Types

The `EventType` field in the EventLogFile object supports these events. Some common fields, such as `CPU_TIME` and `RUN_TIME`, can have null or zero values depending on how the events are generated for a given feature. Sometimes, three quotation marks appear around event data containing special characters in the CSV file. The third quotation mark is necessary for tools and applications to parse the field data at the correct field value boundary.

We generate some text messages in quotes, as in "example message". To preserve the original value, we add two more quotes and the final value looks like """example message""" in the CSV file.

Note: The Insecure External Assets, Login, and Logout events are available in supported Salesforce editions at no additional cost. Contact Salesforce to purchase the remaining event types.

Apex Callout Event Type
Apex Callout events contain details about callouts (external requests) during Apex code execution.

Apex Execution Event Type
Apex Execution events contain details about Apex classes that are used.

Apex REST API Event Type
Apex REST API events capture information about every Apex REST API request.

Apex SOAP Event Type
Apex SOAP events contain details about Web Services API calls.

Apex Trigger Event Type
Apex Trigger events contain details about triggers that fire in an organization.

Apex Unexpected Exception Event Type
The Apex Unexpected Exception event type captures information about unexpected exceptions in Apex code execution. This event type is available in the EventLogFile object in API version 45.0 and later.

API Event Type

API events contain details about your organization's web services API activity.

Asynchronous Report Run Event Type

Asynchronous Report Run events are created for reporting requests that are scheduled. This category includes dashboard refreshes, asynchronous reports, schedule reports, and analytics snapshots.

Aura Request Event Type

Aura Request events contain details of requests to Apex methods from Aura and Lightning web components. For example, you can benchmark request time or identify the URI of an unsuccessful request.

Bulk API Event Type

Bulk API events contain details about Bulk API requests.

Change Set Operation Event Type

Change Set Operation events contain information from change set migrations.

Concurrent Long-Running Apex Limit Event Type

Concurrent Long-Running Apex Limit events contain information about long-running concurrent Apex requests in your org that Salesforce terminated after reaching your org's concurrency limit. Requests with an established Apex context that execute for 5 seconds are counted towards your org's limit of concurrent long-running requests. (Asynchronous requests don't count towards the limit.) When there are more than 10 long-running requests (org default limit), additional long-running requests are terminated. This event type is available in the EventLogFile object in API version 45.0 and later.

Console Event Type

Console events contain information about the performance and use of Salesforce Consoles. The Console events are logged whenever a Console tab is opened with a sidebar component. Outside of that, when Console tabs are opened, a regular view record detail event is served just like in Salesforce Classic.

Content Distribution Event Type

Content Distribution events contain information about content distributions and deliveries to users.

Content Document Link Event Type

Content Document Link events contain sharing information for content documents.

Content Transfer Event Type

Content Transfer events contain information about content transfer events, such as downloads, uploads, and previews. This information includes events performed on files and attachments to records.

Continuation Callout Summary Event Type

Continuation Callout Summary events contain information about all of the asynchronous callouts performed during a transaction, their response status codes, execution times, and URL endpoint destinations. This event type is available in the EventLogFile object in API version 43.0 and later.

Dashboard Event Type

Dashboard events contain details about dashboards that users view.

Document Attachment Downloads Event Type

Document Attachment Downloads events contain details of document and attachment downloads.

External Cross-Org Callout Event Type

External Cross-Org Callout events represent external data callouts via the cross-org adapter for Salesforce Connect. This event type is available in the EventLogFile object in API version 40.0 and later.

External Custom Apex Callout Event Type

External Custom Apex Callout events represent external data callouts via custom adapters for Salesforce Connect. This event type is available in the EventLogFile object in API version 40.0 and later.

External OData Callout Event Type

External OData Callout events represent external data callouts via the OData 2.0 and OData 4.0 adapters for Salesforce Connect. This event type is available in the EventLogFile object in API version 40.0 and later.

Insecure External Assets Event Type

Insecure External Assets events contain information about external assets. External assets include images or videos accessed by users over an insecure HTTP protocol. The event lists all your Salesforce pages that contain assets hosted insecurely on third-party sites that users loaded with a Chrome, Firefox, Microsoft Edge, or Safari browser. The `INSECURE_URI` field contains the URI being used to load the asset insecurely. The Insecure External Assets event type is available in the EventLogFile object in API version 42.0 and later.

Knowledge Article View Event Type

Knowledge Article View events contain user activity with your knowledge base.

Lightning Error Event Type

Lightning Error events represent errors that occurred during user interactions with Lightning Experience and the Salesforce mobile app. This event type is available in the EventLogFile object in API version 39.0 and later.

Lightning Interaction Event Type

Lightning Interaction events track user actions in Lightning Experience and the Salesforce mobile app, such as the user clicking, tapping, or scrolling on a page. This event type is available in the EventLogFile object in API version 39.0 and later.

Lightning Page View Event Type

Lightning Page View events represent information about the page on which the event occurred in Lightning Experience and the Salesforce mobile app. A Lightning Page View event tracks the page a user visited, how long the user spent on the page, and the load time for the page. This event type is available in the EventLogFile object in API version 39.0 and later.

Lightning Performance Event Type

Lightning Performance events track trends in Lightning Experience and Salesforce mobile app performance. This event type is available in the EventLogFile object in API version 39.0 and later.

Login Event Type

Login events contain details about your org's user login history.

Login As Event Type

Login As events contain details about what a Salesforce admin did while logged in as another user.

Logout Event Type

Logout events contain details of user logouts.

Metadata API Operation Event Type

Metadata API Operation events contain details of Metadata API retrieval and deployment requests.

Multiblock Report Event Type

Multiblock Report events contain details about Joined Report reports.

One Commerce Usage Event Type

One Commerce Usage events capture information about your Commerce instance. This event type is available in the EventLogFile object in API version 51.0 and later.

Package Install Event Type

Package Install events contain details about package installation in the organization.

Platform Encryption Event Type

Platform Encryption event contains information about tenant secret and derived encryption key usage. This event type is available in API versions 41.0 and later.

Queued Execution Event Type

Queued Execution events contain details about queued executions—for example, batch Apex.

Report Event Type

Report events contain information about what happened when a user ran a report. This event type includes all activity that's in the Report Export event type, plus more. For example, it has user activity for reports exported as both Formatted Report and Details Only output.

Report Export Event Type

Report Export events contain details about reports that a user exported. For example, this event type captures when a user exports a report as Details Only output. But it doesn't capture reports that users export as Formatted Report output. For that data, see the Report event type.

REST API Event Type

REST API events contain details about REST-specific requests.

Sandbox Event Type

Sandbox events contain details about sandbox copies.

Search Event Type

Search events contain details about the user's search query. All searches within the app, including Experience Cloud sites, are included. However, unauthenticated users won't have a unique Salesforce user ID.

Search Click Event Type

Search Click events contain details about the user's interaction with the search results. All searches within the app, including Experience Cloud sites, are included. However, unauthenticated users won't have a unique Salesforce user ID.

Sites Event Type

Sites events contain details of Site.com requests. Requests can originate from the browser (UI).

Time-Based Workflow Event Type

Time-Based Workflow events contain details about queue activity monitoring.

Transaction Security Event Type

Transaction Security events contain details about policy execution.

URI Event Type

URI events contain details about user interaction with the web browser UI.

Visualforce Request Event Type

Visualforce Request events contain details of Visualforce requests. Requests can originate from the browser (UI).

Wave Change Event Type

Wave Change events represent route or page changes made in the Salesforce Einstein Analytics user interface. A Wave Change event type is captured every time the user opens a new Analytics asset or tab or switches between tabs. Wave Change events are logged when opening new tabs and switching back to previously opened tabs.

Wave Download Event Type

Wave Download events represent downloads made from lens explorations and dashboard widgets in the Salesforce Einstein Analytics user interface. A Wave Download event type is captured when a user downloads images (.png), Microsoft® Excel® data (.xls), or comma-separated values (.csv) files.

Wave Interaction Event Type

Wave Interaction events represent route or page changes made in the Salesforce Einstein Analytics user interface. A Wave Interaction event type is captured when a tab is closed. It also collates the interaction statistics over the life of the tab, including total open time, read time, and so on. These statistics are aggregated as you go to other tabs and return, and logged only once when the tab is closed.

Wave Performance Event Type
Wave Performance events help you track trends in your Analytics performance.

SEE ALSO:
EventLogFile

Apex Callout Event Type

Apex Callout events contain details about callouts (external requests) during Apex code execution.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: `96.43.144.26`.
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.
`EVENT_TYPE`	**Type** String **Description** The type of event. The value is always `ApexCallout`.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: `GeJCsym5eyvtEK2I`.

`METHOD`	**Type** String **Description** The HTTP method of the callout. **Example** For example: `GET`, `POST`, `PUT`, and so on.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. For example: `3nWgxWbDKWWDIk0FKfF5DV`.
`REQUEST_SIZE`	**Type** Number **Description** The size of the callout request body, in bytes.
`RESPONSE_SIZE`	**Type** Number **Description** The size of the callout response, in bytes.
`RUN_TIME`	**Type** Number **Description** Not used for this event type. Use the `TIME` field instead.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started.

	For example: `d7DEq/ANa7nNZZVD`.
`SUCCESS`	**Type** Boolean **Description** 1 if the request was successful, and 0 if not.
`TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds (ms).
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`TYPE`	**Type** String **Description** The type of Apex callout. For example: `REST` or `AJAX`.
`URI`	**Type** String **Description** The URI of the page that's receiving the request. For example: `/home/home.jsp`.
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.

`URL`	**Type** String **Description** The callout endpoint URL. **Example** `www.salesforce.com`
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: `0059000000I1SNIA0`.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Apex Execution Event Type

Apex Execution events contain details about Apex classes that are used.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`CALLOUT_TIME`	**Type** Number **Description** Time spent waiting on webservice callouts, in milliseconds.
`CLIENT_IP`	**Type** String

	Description The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". If the user's session context isn't available, this field returns a blank value.
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.
`DB_TOTAL_TIME`	**Type** Number **Description** Time (in milliseconds) spent waiting for database processing in aggregate for all operations in the request. Compare this field to `CPU_TIME` to determine whether performance issues are occurring in the database layer or in your own code.
`ENTRY_POINT`	**Type** String **Description** The entry point for this Apex execution. **Example** • `GeneralCloner.cloneAndInsertRecords` • `VF- /apex/CloneUser`
`EVENT_TYPE`	**Type** String **Description** The type of event. The value is always `ApexExecution`.
`EXEC_TIME`	**Type** Number **Description** The end-to-end Apex execution time (in milliseconds).
`IS_LONG_RUNNING_REQUEST`	**Type** Boolean

Field	Details
	Description Indicates whether the request is counted against your org's concurrent long-running Apex request limit (`true`) or not (`false`). Note: Asynchronous Apex jobs (batch, queueable, scheduled, and future), background processes, and bulk API requests are not counted against the concurrent long-running limit.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: `GeJCsym5eyvtEK2I`.
`NUMBER_SOQL_QUERIES`	**Type** Number **Description** The number of SOQL queries that were executed during the event. This value is the aggregate across all namespaces, and can exceed the per-namespace limits. For test executions, the aggregate total value across all test methods executed in the request is used. If you are using this value to track limit consumption, consider filtering out test execution quiddities (indicated by the QUIDDITY field).
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
`QUIDDITY`	**Type** String **Description** The type of outer execution associated with this event. **Example** • `A`–ACS Batch Apex • `B`–Bulk API and Bulk API 2.0

- BA–Start method of a Batch Apex job
- C–Scheduled Apex
- E–Inbound Email Service
- F–Future
- H–Apex REST
- I–Invocable Action
- K–Quick Action
- L–Lightning
- M–Remote Action
- Q–Queueable
- QTXF–Transaction Finalizer for Queueable
- R–Synchronous uncategorized (which is where all transactions not specified elsewhere end up)
- S–QueryLocator Batch Apex (Batch Apex jobs run faster when the start method returns a QueryLocator object that doesn't include related records via a subquery. See Batch Apex Best Practices in Using Batch Apex.)
- TA–Tests Async
- TD–Tests Deployment
- TS–Tests Synchronous
- V–Visualforce
- W–SOAP Webservices
- X–Execute Anonymous

Note: Implementations of the Process.Plugin interface use the quiddity value **R**.

REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. For example: 3nWgxWbDKWWDIk0FKfF5DV.
RUN_TIME	**Type** Number **Description** The amount of time that the request took in milliseconds. Requests with a value over five seconds are considered long-running requests for the purposes of the Concurrent Long-Running Apex Limit.

	Note: HTTP callout processing time isn't included when calculating the 5-second limit. We pause the timer for the callout and resume it when the callout completes.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For example: `d7DEq/ANa7nNZZVD`.
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`URI`	**Type** String **Description** The URI of the page that's receiving the request. For example: `/home/home.jsp`.
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API.

Field	Details
	For example: `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: `0059000000I1SNIA0`.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Apex REST API Event Type

Apex REST API events capture information about every Apex REST API request.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide. For information about Apex REST, see Introduction to Apex REST.

Fields

Field	Details
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: `96.43.144.26`.
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.
`DB_BLOCKS`	**Type** Number

	Description Indicates how much activity is occurring in the database. A high value for this field suggests that adding indexes or filters on your queries would benefit performance.
DB_CPU_TIME	**Type** Number **Description** The CPU time in milliseconds to complete the request. Indicates the amount of activity taking place in the database layer during the request.
DB_TOTAL_TIME	**Type** Number **Description** The time in nanoseconds for a database round trip. Includes time spent in the JDBC driver, network to the database, and DB_CPU_TIME. Compare this field to CPU_TIME to determine whether performance issues are occurring in the database layer or in your own code.
ENTITY_NAME	**Type** Set **Description** API objects that are accessed. For example: Account, Opportunity, Contact, and so on.
EVENT_TYPE	**Type** String **Description** The type of event. The value is always ApexRestApi.
LOGIN_KEY	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: GeJCsym5eyvtEK2I.
MEDIA_TYPE	**Type** String

	Description The media type of the response.
`METHOD`	**Type** String **Description** The HTTP method of the request. For example: `GET`, `POST`, `PUT`, and so on.
`NUMBER_FIELDS`	**Type** Number **Description** The number of fields or columns, where applicable.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
`REQUEST_SIZE`	**Type** Number **Description** The size of the callout request body, in bytes.
`REQUEST_STATUS`	**Type** String **Description** The status of the request for a page view or user interface action. Possible values are: • `S`—Success. Salesforce handled the request successfully. If an Apex controller throws an exception, this status is also returned. • `F`—Failure. Typically 4xx or 5xx HTTP codes, such as no permission to view page, page took too long to render, page is read-only. • `U`—Undefined • `A`—Authorization Error • `R`—Redirect. Typically a 3xx HTTP code, possibly initiated by an Apex controller in a Visualforce page.

- `N`—Not Found. 404 error.

Possible Values

`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. For example: `3nWgxWbDKWWDIk0FKfF5DV`.
`RESPONSE_SIZE`	**Type** Number **Description** The size of the callout response, in bytes.
`ROWS_PROCESSED`	**Type** Number **Description** The number of rows that were processed in the request. For example: `150`.
`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For example: `d7DEq/ANa7nNZZVD`.
`STATUS_CODE`	**Type** Number **Description** The HTTP status code for the response.
`TIMESTAMP`	**Type** String

	Description The access time of Salesforce services in GMT. For example: `20130715233322.670`.
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`URI`	**Type** String **Description** The URI of the page that's receiving the request. For example: `/home/home.jsp`.
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_AGENT`	**Type** Number **Description** The numeric code for the type of client used to make the request (for example, the browser, application, or API).
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API.

	For example: `00590000000I1SNIA0`.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Apex SOAP Event Type

Apex SOAP events contain details about Web Services API calls.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`CLASS_NAME`	**Type** String **Description** The Apex class name. If the class is part of a managed package, this string includes the package namespace.
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: `96.43.144.26`.
`CLIENT_NAME`	**Type** String **Description** The name of the client that's using Salesforce services. This field is an optional parameter that can be passed in API calls. If blank, the caller didn't specify a client in the CallOptions header.
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.

DB_TOTAL_TIME	**Type** Number **Description** Time (in milliseconds) spent waiting for database processing in aggregate for all operations in the request. Compare this field to CPU_TIME to determine whether performance issues are occurring in the database layer or in your own code.
EVENT_TYPE	**Type** String **Description** The type of event. The value is always ApexSoap.
LIMIT_USAGE_PERCENT	**Type** Number **Description** The percentage of Apex SOAP calls that were made against the organization's limit.
LOGIN_KEY	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: GeJCsym5eyvtEK2I.
METHOD_NAME	**Type** String **Description** The name of the calling Apex method.
ORGANIZATION_ID	**Type** Id **Description** The 15-character ID of the organization. For example: 00D000000000123. **Example**
QUERY	**Type** String **Description** The SOQL query, if one was performed.

REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. For example: 3nWgxWbDKWWDIk0FKfF5DV.
REQUEST_STATUS	**Type** String **Description** The status of the request for a page view or user interface action. Possible values are: • S—Success. Salesforce handled the request successfully. If an Apex controller throws an exception, this status is also returned. • F—Failure. Typically 4xx or 5xx HTTP codes, such as no permission to view page, page took too long to render, page is read-only. • U—Undefined • A—Authorization Error • R—Redirect. Typically a 3xx HTTP code, possibly initiated by an Apex controller in a Visualforce page. • N—Not Found. 404 error. **Possible Values**
RUN_TIME	**Type** Number **Description** The amount of time that the request took in milliseconds. Requests with a value over five seconds are considered long-running requests for the purposes of the Concurrent Long-Running Apex Limit. Note: HTTP callout processing time isn't included when calculating the 5-second limit. We pause the timer for the callout and resume it when the callout completes.
SESSION_KEY	**Type** String

Field	Details
	Description The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For example: `d7DEq/ANa7nNZZVD`.
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`URI`	**Type** String **Description** The URI of the page that's receiving the request. For example: `/home/home.jsp`.
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
`USER_ID_DERIVED`	**Type** Id

Field	Details
	Description The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: `00590000000I1SNIA0`.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Apex Trigger Event Type

Apex Trigger events contain details about triggers that fire in an organization.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: `96.43.144.26`.
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.
`DB_TOTAL_TIME`	**Type** Number **Description** Time (in milliseconds) spent waiting for database processing in aggregate for all operations in the request. Compare this field to `CPU_TIME` to determine whether performance issues are occurring in the database layer or in your own code.
`ENTITY_NAME`	**Type** String

	Description The name of the object affected by the trigger.
`EVENT_TYPE`	**Type** String **Description** The type of event. The value is always `ApexTrigger`.
`EXEC_TIME`	**Type** Number **Description** The end-to-end Apex execution time (in milliseconds).
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: `GeJCsym5eyvtEK2I`.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. For example: `3nWgxWbDKWWDIk0FKfF5DV`.
`REQUEST_STATUS`	**Type** String **Description** The status of the request for a page view or user interface action. Possible values are:

	• `S`—Success. Salesforce handled the request successfully. If an Apex controller throws an exception, this status is also returned. • `F`—Failure. Typically 4xx or 5xx HTTP codes, such as no permission to view page, page took too long to render, page is read-only. • `U`—Undefined • `A`—Authorization Error • `R`—Redirect. Typically a 3xx HTTP code, possibly initiated by an Apex controller in a Visualforce page. • `N`—Not Found. 404 error. **Possible Values**
`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds. Requests with a value over five seconds are considered long-running requests for the purposes of the Concurrent Long-Running Apex Limit. Note: HTTP callout processing time isn't included when calculating the 5-second limit. We pause the timer for the callout and resume it when the callout completes.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For example: `d7DEq/ANa7nNZZVD`.
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`).

	For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`TRIGGER_ID`	**Type** String **Description** The 15-character ID of the trigger that was fired.
`TRIGGER_NAME`	**Type** String **Description** For triggers coming from managed packages, `TRIGGER_NAME` includes a namespace prefix separated with a `.` character. If no namespace prefix is present, the trigger is from an unmanaged trigger. Examples: • `examplePackage.managedExampleTrigger`- Managed trigger from the examplePackage namespace • `unmanagedExampleTrigger` - Unmanaged trigger
`TRIGGER_TYPE`	**Type** String **Description** The type of this trigger. **Possible Values** • AfterInsert • AfterUpdate • BeforeInsert • BeforeUpdate
`URI`	**Type** String **Description** The URI of the page that's receiving the request. For example: `/home/home.jsp`.
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.

USER_ID	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
USER_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: `0059000000I1SNIA0`.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Apex Unexpected Exception Event Type

The Apex Unexpected Exception event type captures information about unexpected exceptions in Apex code execution. This event type is available in the EventLogFile object in API version 45.0 and later.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
EVENT_TYPE	**Type** String **Description** The type of event. The value is always `ApexUnexpectedException`.
EXCEPTION_MESSAGE	**Type** Text **Description** The type of exception. **Example** Divide by 0
EXCEPTION_TYPE	**Type** String

Field	Details
	Description The type of exception. **Example** System.MathException
ORGANIZATION_ID	**Type** Id **Description** The 15-character ID of the organization. For example: 00D000000000123. **Example**
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. For example: 3nWgxWbDKWWDIk0FKfF5DV.

STACK_TRACE	**Type**
	Text
	Description
	The stack trace for the exception.
	Note: If the exception is thrown from a managed package, STACK_TRACE is omitted.
	Example
	`Class.OpportunityUtility.insert: line 22, column 1`
	`AnonymousBlock: line 1, column 1`

TIMESTAMP	**Type** String **Description** The access time of Salesforce services in GMT. For example: 20130715233322.670.
TIMESTAMP_DERIVED	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (YYYY-MM-DDTHH:MM:SS.sssZ).

Field	Details
	For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

API Event Type

API events contain details about your organization's web services API activity.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`API_TYPE`	**Type** String **Description** The type of API request. Possible values are: • `D`—Apex Class • `E`—SOAP Enterprise • `I`—SOAP Cross Instance • `M`—SOAP Metadata • `O`—Old SOAP • `P`—SOAP Partner • `S`—SOAP Apex • `T`—SOAP Tooling • `X`—XmlRPC • `f`—Feed • `l`—Live Agent • `p`—SOAP ClientSync
`API_VERSION`	**Type** String **Description** The version of the API that's being used. For example: `36.0`.

`CLIENT_IP`	**Type** String **Description** The IP address of the client that’s using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as “Salesforce.com IP”. For example: `96.43.144.26`.
`CLIENT_NAME`	**Type** String **Description** The name of the client that’s using Salesforce services. This field is an optional parameter that can be passed in API calls. If blank, the caller didn't specify a client in the CallOptions header.
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.
`DB_BLOCKS`	**Type** Number **Description** Indicates how much activity is occurring in the database. A high value for this field suggests that adding indexes or filters on your queries would benefit performance.
`DB_CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds to complete the request. Indicates the amount of activity taking place in the database layer during the request.
`DB_TOTAL_TIME`	**Type** Number **Description** The time in nanoseconds for a database round trip. Includes time spent in the JDBC driver, network to the database, and `DB_CPU_TIME`. Compare this field to `CPU_TIME` to determine whether performance issues are occurring in the database layer or in your own code.

ENTITY_NAME	**Type** Set **Description** API objects that are accessed. For example: `Account`, `Opportunity`, `Contact`, and so on.
EVENT_TYPE	**Type** String **Description** The type of event. The value is always `API`.
LOGIN_KEY	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: `GeJCsym5eyvtEK2I`.
METHOD_NAME	**Type** String **Description** The name of the calling Apex method.
ORGANIZATION_ID	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. For example: `3nWgxWbDKWWDIk0FKfF5DV`.
REQUEST_SIZE	**Type** Number

	Description The size of the callout request body, in bytes.
`REQUEST_STATUS`	**Type** String **Description** The status of the request for a page view or user interface action. Possible values are: • `S`—Success. Salesforce handled the request successfully. If an Apex controller throws an exception, this status is also returned. • `F`—Failure. Typically 4xx or 5xx HTTP codes, such as no permission to view page, page took too long to render, page is read-only. • `U`—Undefined • `A`—Authorization Error • `R`—Redirect. Typically a 3xx HTTP code, possibly initiated by an Apex controller in a Visualforce page. • `N`—Not Found. 404 error. **Possible Values**
`RESPONSE_SIZE`	**Type** Number **Description** The size of the callout response, in bytes.
`ROWS_PROCESSED`	**Type** Number **Description** The number of rows that were processed in the request. For example: `150`.
`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String

Field	Details
	Description The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For example: `d7DEq/ANa7nNZZVD`.
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`URI`	**Type** String **Description** The URI of the page that's receiving the request. For example: `/home/home.jsp`.
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
`USER_ID_DERIVED`	**Type** Id

Field	Details
	Description The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: `00590000000I1SNIA0`.

SEE ALSO:

[EventLogFile Supported Event Types](#)

[EventLogFile](#)

Asynchronous Report Run Event Type

Asynchronous Report Run events are created for reporting requests that are scheduled. This category includes dashboard refreshes, asynchronous reports, schedule reports, and analytics snapshots.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`AVERAGE_ROW_SIZE`	**Type** Number **Description** The average row size of all rows in the Asynchronous Report Run event, in bytes. A large average size, coupled with a high `ROW_COUNT`, can indicate that a user is downloading information for fraudulent purposes. For example, a salesperson who downloads all sales leads before departing for a competitor. **Example** 700
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: `96.43.144.26`.
`CPU_TIME`	**Type** Number

	Description The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.
`DASHBOARD_ID`	**Type** String **Description** The 15-character ID of the dashboard that was run.
`DB_TOTAL_TIME`	**Type** Number **Description** The time in nanoseconds for a database round trip. Includes time spent in the JDBC driver, network to the database, and `DB_CPU_TIME`. Compare this field to `CPU_TIME` to determine whether performance issues are occurring in the database layer or in your own code.
`DB_BLOCKS`	**Type** Number **Description** Indicates how much activity is occurring in the database. A high value for this field suggests that adding indexes or filters on your queries would benefit performance.
`DB_CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds to complete the request. Indicates the amount of activity taking place in the database layer during the request.
`DISPLAY_TYPE`	**Type** String **Description** The report display type, indicating the run mode of the report. Possible values are: • `D`—Dashboard • `S`—Show Details • `H`—Hide Details
`ENTITY_NAME`	**Type** String

	Description The name of the object affected by the trigger.
`EVENT_TYPE`	**Type** String **Description** The type of event. The value is always `AsynchronousReportRun`.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: `GeJCsym5eyvtEK2I`.
`NUMBER_BUCKETS`	**Type** Number **Description** The number of buckets that were used in the report.
`NUMBER_COLUMNS`	**Type** Number **Description** The number of columns in the report.
`NUMBER_EXCEPTION_FILTERS`	**Type** Number **Description** The number of exception filters that are used in the report.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
`ORIGIN`	**Type** String

Description

The context in which the report executed, such as from a UI (Classic, Lightning, Mobile), through an API (synchronous, asynchronous, Apex), or through a dashboard.

Possible Values

- `ReportOpenedFromMobileDashboard`: Report executed when a user clicked a dashboard component on a mobile device and drilled down to a report.
- `DashboardComponentUpdated`: Report executed when a user refreshed a dashboard component.
- `DashboardComponentPreviewed`: Report executed from a Lightning dashboard component preview.
- `ReportRunUsingSynchronousApi`: Report executed from a synchronous API.
- `ReportRunUsingAsynchronousApi`: Report executed from an asynchronous API.
- `ReportRunUsingApexSynchronousApi`: Report executed from the synchronous Apex API.
- `ReportRunUsingApexAsynchronousApi`: Report executed from the asynchronous Apex API.
- `ReportExported`: Report executed from a printable view or report export that was not asynchronous nor an API export.
- `ReportRunFromClassic`: Report executed from the Run Report option of Salesforce Classic.
- `ReportRunFromMobile`: Report executed from the Run Report option of the mobile Salesforce app.
- `ReportRunFromLightning`: Report executed from the Run option in Lightning Experience from a non-mobile browser.
- `ReportRunFromRestApi`: Report executed from the REST API.
- `ReportPreviewed`: Report executed when a user got preview results while using the report builder.
- `ReportScheduled`: Report was scheduled.
- `ProbeQuery`: Report executed from a probe query.
- `ReportRunFromReportingSnapshot`: Report executed through Snapshot Analytics.
- `ReportExportedAsynchronously`: Report was exported asynchronously.
- `ReportExportedUsingExcelConnector`: Report was exported using the Excel connector.

	- `ChartRenderedOnVisualforcePage`: Report executed from a rendered chart on a VisualForce Page. - `ChartRenderedInEmbeddedAnalyticsApp`: Report executed from a rendered chart in an embedded Analytics app. - `ReportRunAndNotificationSent`: Report executed through the notifications API. - `ChartRenderedOnHomePage`: Report executed from a rendered chart on the home page. - `ReportResultsAddedToWaveTrending`: Report executed when a user trended a report in Einstein Analytics. - `ReportAddedToCampaign`: Report was added from an Add to Campaign action. - `ReportResultsAddedToEinsteinDiscovery`: Report executed synchronously from Einstein Discovery. - `Unknown`: Report execution origin is unknown. - `Test`: Report execution resulted from a test.
`RENDERING_TYPE`	**Type** String **Description** Describes the format of the report output in Salesforce Classic. If the report was exported in Lightning Experience, this field is blank. **Possible Values** - `W`: Web (HTML) - `E`: Email - `P`: Printable - `X`: Excel - `C`: Comma-separated values (CSV) - `J`: JavaScript Object Notation (JSON) - `D`: Dummy data
`REPORT_ID`	**Type** Id **Description** The 15-character ID of the report that was run.
`REPORT_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the report that was run.

Field	Details
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. For example: 3nWgxWbDKWWDIk0FKfF5DV.
REQUEST_STATUS	**Type** String **Description** The status of the request for a page view or user interface action. Possible values are: • S—Success. Salesforce handled the request successfully. If an Apex controller throws an exception, this status is also returned. • F—Failure. Typically 4xx or 5xx HTTP codes, such as no permission to view page, page took too long to render, page is read-only. • U—Undefined • A—Authorization Error • R—Redirect. Typically a 3xx HTTP code, possibly initiated by an Apex controller in a Visualforce page. • N—Not Found. 404 error. **Possible Values**
ROW_COUNT	**Type** Number **Description** The number of rows that were processed in the Asynchronous Report Run event. High row counts, coupled with a high AVERAGE_ROW_SIZE, can indicate that a user is downloading information for fraudulent purposes. For example, a salesperson who downloads all sales leads before departing for a competitor. **Example** 150
RUN_TIME	**Type** Number **Description** The amount of time that the request took in milliseconds.

SESSION_KEY	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For example: `d7DEq/ANa7nNZZVD`.
SORT	**Type** String **Description** The sort column and order that was used in the report.
TIMESTAMP	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
TIMESTAMP_DERIVED	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
URI	**Type** String **Description** The URI of the page that's receiving the request. For example: `/home/home.jsp`.
URI_ID_DERIVED	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
USER_ID	**Type** Id

	Description The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: `00590000000I1SNIA0`.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Aura Request Event Type

Aura Request events contain details of requests to Apex methods from Aura and Lightning web components. For example, you can benchmark request time or identify the URI of an unsuccessful request.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`ACTION_MESSAGE`	**Type** String **Description** The action (Apex method) names and times for all the actions in the request in the format: `action1Name=action1Time;action2Name=action2Time...`
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: `96.43.144.26`.

CPU_TIME	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.
DB_TOTAL_TIME	**Type** Number **Description** The time in nanoseconds for a database round trip. Includes time spent in the JDBC driver, network to the database, and `DB_CPU_TIME`. Compare this field to `CPU_TIME` to determine whether performance issues are occurring in the database layer or in your own code.
EVENT_TYPE	**Type** String **Description** The type of event. The value is always `AuraRequest`.
LOGIN_KEY	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: `GeJCsym5eyvtEK2I`.
ORGANIZATION_ID	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. For example: `3nWgxWbDKWWDIk0FKfF5DV`.

REQUEST_METHOD	**Type** String **Description** The HTTP method of the request, such as GET or POST.
REQUEST_STATUS	**Type** String **Description** The status of the request for a page view or user interface action. Possible values are: • S—Success. Salesforce handled the request successfully. If an Apex controller throws an exception, this status is also returned. • F—Failure. Typically 4xx or 5xx HTTP codes, such as no permission to view page, page took too long to render, page is read-only. • U—Undefined • A—Authorization Error • R—Redirect. Typically a 3xx HTTP code, possibly initiated by an Apex controller in a Visualforce page. • N—Not Found. 404 error. **Possible Values**
RUN_TIME	**Type** Number **Description** The amount of time that the request took in milliseconds.
SESSION_KEY	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For example: d7DEq/ANa7nNZZVD.
TIMESTAMP	**Type** String **Description** The access time of Salesforce services in GMT. For example: 20130715233322.670.

TIMESTAMP_DERIVED	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
URI	**Type** String **Description** The URI of the resource that's receiving the request. For example: `/aura`.
URI_ID_DERIVED	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
USER_AGENT	**Type** Number **Description** The numeric code for the type of client used to make the request (for example, the browser, application, or API).
USER_ID	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
USER_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API.

	For example: `00590000000I1SNIA0`.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Bulk API Event Type

Bulk API events contain details about Bulk API requests.

Note: This event type does not include Bulk API 2.0 requests.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`BATCH_ID`	**Type** String **Description** The 15-character ID of the Bulk API batch.
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: `96.43.144.26`.
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.
`ENTITY_TYPE`	**Type** String **Description** The type of entity that the Bulk API used.

`EVENT_TYPE`	**Type** String **Description** The type of event. The value is always `BulkApi`.
`JOB_ID`	**Type** String **Description** The 15-character ID of the Bulk API job.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: `GeJCsym5eyvtEK2I`.
`MESSAGE`	**Type** EscapedString **Description** Any success or error message that's associated with the request.
`NUMBER_FAILURES`	**Type** Number **Description** The number of failures that were returned with the request.
`OPERATION_TYPE`	**Type** String **Description** The type of Bulk API operation that was performed.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
`REQUEST_ID`	**Type** String

	Description The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. For example: `3nWgxWbDKWWDIk0FKfF5DV`.
`ROWS_PROCESSED`	**Type** Number **Description** The number of rows that were processed in the request. For example: `150`.
`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For example: `d7DEq/ANa7nNZZVD`.
`SUCCESS`	**Type** Boolean **Description** Whether the batch was successful.
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.

URI	**Type** String **Description** The URI of the page that's receiving the request. For example: `/home/home.jsp`.
URI_ID_DERIVED	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
USER_ID	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
USER_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: `00590000000I1SNIA0`.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Change Set Operation Event Type

Change Set Operation events contain information from change set migrations.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
CHANGE_SET_NAME	**Type** String

Field	Details
	Description The name of the change set.
CLIENT_IP	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: `96.43.144.26`.
CPU_TIME	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.
EVENT_TYPE	**Type** String **Description** The type of event. The value is always `ChangeSetOperation`.
LOGIN_KEY	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: `GeJCsym5eyvtEK2I`.
OPERATION	**Type** String **Description** The operation that's being performed. **Possible Values** • DELETE • DEPLOY • UPLOAD • VALIDATE

`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. For example: `3nWgxWbDKWWDIk0FKfF5DV`.
`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For example: `d7DEq/ANa7nNZZVD`.
`TARGET_ORG_ID`	**Type** Id **Description** The 15-character ID of the organization that's receiving the change set.
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
`TIMESTAMP_DERIVED`	**Type** DateTime

	Description The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`URI`	**Type** String **Description** The URI of the page that's receiving the request. For example: `/home/home.jsp`.
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: `00590000000I1SNIA0`.

SEE ALSO:
EventLogFile Supported Event Types
EventLogFile

Concurrent Long-Running Apex Limit Event Type

Concurrent Long-Running Apex Limit events contain information about long-running concurrent Apex requests in your org that Salesforce terminated after reaching your org's concurrency limit. Requests with an established Apex context that execute for 5 seconds are counted towards your org's limit of concurrent long-running requests. (Asynchronous requests don't count towards the limit.) When there are more than 10 long-running requests (org default limit), additional long-running requests are terminated. This event type is available in the EventLogFile object in API version 45.0 and later.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
EVENT_TYPE	**Type** String **Description** The type of event. The value is always ConcurrentLongRunningApexLimit.
NUMBER_REQUESTS	**Type** Number **Description** Count of requests with an established Apex context executing for longer than 5 seconds in your org.
ORGANIZATION_ID	**Type** Id **Description** The 15-character ID of the organization. For example: 00D000000000123. **Example**
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. For example: 3nWgxWbDKWWDIk0FKfF5DV.
REQUEST_URI	**Type** String **Description** URI of the long-running Apex request that Salesforce terminated. **Example** /apex/ApexClassName
REQUESTS_LIMIT	**Type** Number **Description** Maximum count of requests with an established Apex context that can execute for longer than 5 seconds. When NUMBER_REQUESTS reaches this limit, then additional long-running

Field	Details
	Apex requests are terminated. (Asynchronous requests don't count towards the limit.) The default limit is 10. **Example** 10
TIMESTAMP	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
TIMESTAMP_DERIVED	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
USER_ID	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`

Usage

For example, you can monitor Concurrent Long-Running Apex Limit log counts to get a benchmark or plot a count by hour. To identify where the limit was exceeded, see the REQUEST_URI field. Then, cross-reference this data with Apex Execution event data where the average RUN_TIME exceeds 5 seconds. To identify synchronous requests only, cross-reference event data with the QUIDDITY field in Apex Execution event data. For example, QUIDDITY NOT IN (A,BA,F,Q,S) and CALLOUT_TIME (>5000).

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Salesforce Developers Blog: Designing Force.com Applications That Avoid Hitting Concurrent Request Limits

Console Event Type

Console events contain information about the performance and use of Salesforce Consoles. The Console events are logged whenever a Console tab is opened with a sidebar component. Outside of that, when Console tabs are opened, a regular view record detail event is served just like in Salesforce Classic.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
CLIENT_IP	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: `96.43.144.26`.
COMPONENT_ID	**Type** Id **Description** The 15-character ID of the component.
COMPONENT_ID_DERIVED	**Type** Id **Description** The 18-character, case-insensitive ID of the component.
CONSOLE_ID	**Type** Id **Description** The 15-character ID of the console.
CONSOLE_ID_DERIVED	**Type** Id **Description** The 18-character, case-insensitive ID of the console.
CPU_TIME	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.
DB_TOTAL_TIME	**Type** Number **Description** The time in nanoseconds for a database round trip. Includes time spent in the JDBC driver, network to the database, and `DB_CPU_TIME`. Compare this field to `CPU_TIME` to

	determine whether performance issues are occurring in the database layer or in your own code.
`EVENT_TYPE`	**Type** String **Description** The type of event. The value is always `Console`.
`LICENSE_CONTEXT`	**Type** String **Description** The license context in which a user is using a console. **Example** service, salesandservice, sales
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: `GeJCsym5eyvtEK2I`.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
`RECORD_ID`	**Type** Id **Description** The 15-character ID of the record that's associated with the console.
`RECORD_ID_DERIVED`	**Type** Id **Description** The 18-character, case-insensitive ID of the record that's associated with the console.

REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. For example: 3nWgxWbDKWWDIk0FKfF5DV.
REQUEST_STATUS	**Type** String **Description** The status of the request for a page view or user interface action. Possible values are: • S—Success. Salesforce handled the request successfully. If an Apex controller throws an exception, this status is also returned. • F—Failure. Typically 4xx or 5xx HTTP codes, such as no permission to view page, page took too long to render, page is read-only. • U—Undefined • A—Authorization Error • R—Redirect. Typically a 3xx HTTP code, possibly initiated by an Apex controller in a Visualforce page. • N—Not Found. 404 error. **Possible Values**
RUN_TIME	**Type** Number **Description** The amount of time that the request took in milliseconds.
SESSION_KEY	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For example: d7DEq/ANa7nNZZVD.
TIMESTAMP	**Type** String

	Description The access time of Salesforce services in GMT. For example: `20130715233322.670`.
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`URI`	**Type** String **Description** The URI of the page that's receiving the request. For example: `/home/home.jsp`.
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: `00590000000I1SNIA0`.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Content Distribution Event Type

Content Distribution events contain information about content distributions and deliveries to users.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
ACTION	**Type** String **Description** The action that's used when a delivery is viewed. **Possible Values** • VIEW • INSERT • UPDATE
DELIVERY_ID	**Type** Id **Description** The 15-character ID of the content delivery.
DELIVERY_LOCATION	**Type** String **Description** The location of the delivery.
EVENT_TYPE	**Type** String **Description** The type of event. The value is always ContentDistribution.
ORGANIZATION_ID	**Type** Id **Description** The 15-character ID of the organization. For example: 00D000000000123. **Example**
RELATED_ENTITY_ID	**Type** Id

	Description The 15-character ID of the record that's associated with the delivery distribution.
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. For example: `3nWgxWbDKWWDIk0FKfF5DV`.
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: `00590000000I1SNIA0`.
`VERSION_ID`	**Type** Id

Field	Details
	Description The 15-character ID of the content version.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Content Document Link Event Type

Content Document Link events contain sharing information for content documents.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
DOCUMENT_ID	**Type** Id **Description** The 15-character ID of the document that's being shared.
EVENT_TYPE	**Type** String **Description** The type of event. The value is always `ContentDocumentLink`.
ORGANIZATION_ID	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. For example: `3nWgxWbDKWWDIk0FKfF5DV`.

Field	Details
SHARED_WITH_ENTITY_ID	**Type** Id **Description** Who the document was shared with.
SHARING_OPERATION	**Type** String **Description** The type of sharing operation on the document. **Possible Values** • INSERT • UPDATE • DELETE
SHARING_PERMISSION	**Type** String **Description** What permissions the document was shared with. **Possible Values** • V: Viewer • C: Collaborator • I: Inferred—that is, the sharing permissions were inferred from a relationship between the viewer and document. For example, a document's owner has a sharing permission to the document itself. Or, a document can be a part of a content collection, and the viewer has sharing permissions to the collection rather than explicit permissions to the document directly.
TIMESTAMP	**Type** String **Description** The access time of Salesforce services in GMT. For example: 20130715233322.670.
TIMESTAMP_DERIVED	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (YYYY-MM-DDTHH:MM:SS.sssZ). For example: 2015-07-27T11:32:59.555Z. Timezone is GMT.

USER_ID	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: 00530000009M943
USER_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: 0059000000I1SNIA0.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Content Transfer Event Type

Content Transfer events contain information about content transfer events, such as downloads, uploads, and previews. This information includes events performed on files and attachments to records.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
DOCUMENT_ID	**Type** Id **Description** The 15-character ID of the document that's being shared.
DOCUMENT_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the document that's being shared.
EVENT_TYPE	**Type** String

Field	Details
	Description The type of event. The value is always `ContentTransfer`.
`FILE_PREVIEW_TYPE`	**Type** String **Description** The content type of the file version.
`FILE_TYPE`	**Type** String **Description** The content type of the file preview.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. For example: `3nWgxWbDKWWDIk0FKfF5DV`.
`SIZE_BYTES`	**Type** Number **Description** The size of the file transfer, in bytes.
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
`TIMESTAMP_DERIVED`	**Type** DateTime

	Description The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`TRANSACTION_TYPE`	**Type** String **Description** The operation that was performed, including operations on files and attachments to records. For example, you can track operations in the Attachments related list on a case. **Possible Values** • `VersionDownloadAction` and `VersionDownloadApi` represent downloads via the user interface and API respectively. • `VersionRenditionDownload` represents a file preview action. • `saveVersion` represents a file that's being uploaded.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: `0059000000I1SNIA0`.
`VERSION_ID`	**Type** Id **Description** The 15-character ID of the content version.
`VERSION_ID_DERIVED`	**Type** Id

	Description The 18-character case insensitive ID of the content version.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Continuation Callout Summary Event Type

Continuation Callout Summary events contain information about all of the asynchronous callouts performed during a transaction, their response status codes, execution times, and URL endpoint destinations. This event type is available in the EventLogFile object in API version 43.0 and later.

For details about event monitoring, see the Trailhead Event Monitoring module or the REST API Developer's Guide.

Fields

Field	Details
CONTINUATION_ID	**Type** String **Description** A unique ID identifying a sequence of events within a request. **Example** SFDC-Continuation-14e3cg85-961d-389e-7bz1-3d171543162a
DURATION	**Type** Number **Description** Total duration of continuation, in milliseconds.
EVENT_TYPE	**Type** String **Description** The type of event. The value is always `ContinuationCalloutSummary`.
ORGANIZATION_ID	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**

Field	Details
ORIGIN_REQUEST_ID	**Type** Id **Description** The ID of the request that initiated a callout. **Example** TID:5ILoVKlztX_rDDJcp7
REQUEST_FORM_SIZE	**Type** String **Description** Continuation request form size, in bytes. Depending on how many HTTP requests were used in a continuation, this field can contain up to three space-separated values.
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. For example: `3nWgxWbDKWWDIk0FKfF5DV`.
RESPONSE_SIZE	**Type** String **Description** The size of the callout response, in bytes. Depending on how many HTTP requests were used in a continuation, this field can contain up to three space-separated values.
STATUS_CODE	**Type** String **Description** The HTTP status or internal code returned by the remote endpoint. A status code of 200 indicates that the request was successful. Other status code values indicate the type of problem that was encountered. Depending on how many HTTP requests were used in a continuation, this field can contain up to three space-separated values. **Examples** • 2000—The timeout was reached, and the server didn't get a chance to respond. • 2001—There was a connection failure. • 2002—Exceptions occurred. • 2003—The response hasn't arrived (which also means that the Apex asynchronous callout framework hasn't resumed). • 2004—The response size is too large (greater than 1 MB).

Field	Details
SUCCESS	**Type** Boolean **Description** Indicates whether the continuation was successful (1) or not (0).
TIMESTAMP	**Type** String **Description** The access time of Salesforce services in GMT. For example: 20130715233322.670.
TIMESTAMP_DERIVED	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (YYYY-MM-DDTHH:MM:SS.sssZ). For example: 2015-07-27T11:32:59.555Z. Timezone is GMT.
URL	**Type** String **Description** The callout endpoint URL. Depending on how many HTTP requests were used in a continuation, this field can contain up to three space-separated values. **Example** http://prod.location.amazonaws.com:1000/orders/order/_search
USER_ID	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: 00530000009M943
USER_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: 00590000000I1SNIA0.
VF_CONTROLLER_SIZE	**Type** String

Field	Details
	Description Continuation Visualforce controller size, in bytes. Depending on how many HTTP requests were used in a continuation, this field can contain up to three space-separated values.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Dashboard Event Type

Dashboard events contain details about dashboards that users view.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: `96.43.144.26`.
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.
`DASHBOARD_COMPONENT_ID`	**Type** Id **Description** The 15-character ID of the dashboard component.
`DASHBOARD_ID`	**Type** String **Description** The 15-character ID of the dashboard that was run.

`DASHBOARD_ID_DERIVED`	**Type** String **Description** The 18-character case insensitive ID of the dashboard that was run.
`DASHBOARD_TYPE`	**Type** String **Description** The type of dashboard. **Possible Values** • `R`: Run as running user • `C`: Run as context user • `S`: Run as specific user
`EVENT_TYPE`	**Type** String **Description** The type of event. The value is always `Dashboard`.
`IS_SCHEDULED`	**Type** Boolean **Description** The value is `true` if the dashboard is a scheduled dashboard.
`IS_SUCCESS`	**Type** Boolean **Description** 1 if the dashboard component ran successfully, 0 if it didn't.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: `GeJCsym5eyvtEK2I`.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`.

	Example
REPORT_ID	**Type** Id **Description** The 15-character ID of the report that was run.
REPORT_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the report that was run.
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. For example: `3nWgxWbDKWWDIk0FKfF5DV`.
RUN_TIME	**Type** Number **Description** The amount of time that the request took in milliseconds.
SESSION_KEY	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For example: `d7DEq/ANa7nNZZVD`.
TIMESTAMP	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
TIMESTAMP_DERIVED	**Type** DateTime

Field	Details
	Description The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`URI`	**Type** String **Description** The URI of the page that's receiving the request. For example: `/home/home.jsp`.
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: `00590000000I1SNIA0`.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Document Attachment Downloads Event Type

Document Attachment Downloads events contain details of document and attachment downloads.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
ENTITY_ID	**Type** Id **Description** The 15-character ID of the entity that's associated with the document or attachment.
EVENT_TYPE	**Type** String **Description** The type of event. The value is always `DocumentAttachmentDownoads`.
FILE_TYPE	**Type** String **Description** The type of the file or attachment.
ORGANIZATION_ID	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. For example: `3nWgxWbDKWWDIk0FKfF5DV`.
TIMESTAMP	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
TIMESTAMP_DERIVED	**Type** DateTime

	Description The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: `0059000000I1SNIA0`.

SEE ALSO:

EventLogFile Supported Event Types
EventLogFile

External Cross-Org Callout Event Type

External Cross-Org Callout events represent external data callouts via the cross-org adapter for Salesforce Connect. This event type is available in the EventLogFile object in API version 40.0 and later.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer Guide.

Note: For the cross-org adapter for Salesforce Connect, event monitoring currently doesn't track search callouts.

Fields

Field	Details
`ACTION`	**Type** String **Description** Action performed by the callout. **Possible Values** • query

Field	Details
	• upsert • delete
ENTITY	**Type** String **Description** Name of the external object being accessed. **Example** Order
EVENT_TYPE	**Type** String **Description** Type of event. Value is always `ExternalCrossOrgCallout`.
EXECUTE_MS	**Type** Number **Description** How long it took (in milliseconds) for Salesforce to prepare and execute the query. Available in API version 42.0 and later. **Example** 1
FETCH_MS	**Type** Number **Description** How long it took (in milliseconds) to retrieve the query results from the external system. Available in API version 42.0 and later. **Example** 452
FILTER	**Type** Text **Description** Field expressions to filter which rows to return. Corresponds to `WHERE` in SOQL queries. **Example** WHERE CustomerId='123456'
HAVING	**Type** Text **Description** Reserved for future use.

Field	Details
LIMIT	**Type** Number **Description** Maximum number of rows to return for a query. Corresponds to `LIMIT` in SOQL queries. **Example** 200
MESSAGE	**Type** String **Description** Error or warning message associated with the failed query callout. Value is always empty for upsert and delete callouts. **Example** System.UnexpectedException: Query is either selecting too many fields or the filter conditions are too complicated
OFFSET	**Type** Number **Description** Number of rows to skip when paging through a result set. Corresponds to `OFFSET` in SOQL queries. If a SOQL query doesn't define an `OFFSET`, the value is -1. **Example** 0 (default)
ORDERBY	**Type** String **Description** Field or column to use for sorting query results, and whether to sort the results in ascending (default) or descending order. Corresponds to `ORDER BY` in SOQL queries. **Examples** • ORDER BY ShipName • ORDER BY ShipName DESC
ORGANIZATION_ID	**Type** Id **Description** 15-character ID of the organization. **Example** 00D000000000123

Field	Details
REQUEST_ID	**Type** String **Description** Unique ID of a transaction. A transaction can contain one or more events. All events in a transaction have the same REQUEST_ID. **Example** 4A13-HSKv3CKs-0FKfceaV
ROWS	**Type** Number **Description** Total number of records in the result set. Value is always 0 for upsert and delete callouts. **Example** 200
ROWS_FETCHED	**Type** Number **Description** Reserved for future use.
SELECT	**Type** String **Description** Comma-separated list of fields being queried. Corresponds to `SELECT` in SOQL queries. **Example** SELECT Id,Name,CustomerID,OrderDate
STATUS	**Type** Boolean **Description** Whether the query was successful. Value is always empty for upsert and delete callouts. **Possible Values** • 1—Success • 0—Failed
SUBQUERIES	**Type** Number **Description** The number of subqueries that the query is split into.

Field	Details
THROUGHPUT	**Type** Number **Description** Reserved for future use.
TIMESTAMP	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
TIMESTAMP_DERIVED	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
TOTAL_MS	**Type** Number **Description** How long it took (in milliseconds) to prepare and execute the query and to retrieve the query results. **Example** 453
USER_ID	**Type** Id **Description** 15-character ID of the user accessing the external system. **Example** 00530000009M943
USING_MRU	**Type** Boolean

Field	Details
	Description Reserved for future use.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

External Custom Apex Callout Event Type

External Custom Apex Callout events represent external data callouts via custom adapters for Salesforce Connect. This event type is available in the EventLogFile object in API version 40.0 and later.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer Guide.

Fields

Field	Details
ACTION	**Type** String **Description** Action performed by the callout. **Possible Values** • query • upsert • delete
ENTITY	**Type** String **Description** Name of the external object being accessed. **Example** Order
EVENT_TYPE	**Type** String **Description** Type of event. Value is always `ExternalCustomApexCallout`.
EXECUTE_MS	**Type** Number

Field	Details
	Description How long it took (in milliseconds) for Salesforce to prepare and execute the query. Available in API version 42.0 and later. **Example** 102
FETCH_MS	**Type** Number **Description** How long it took (in milliseconds) to retrieve the query results from the external system. Available in API version 42.0 and later. **Example** 607
FILTER	**Type** Text **Description** Field expressions to filter which rows to return. Corresponds to `WHERE` in SOQL queries. **Example** Filter:[columnName=CustomerID, columnValue=537, subfilters=null, tableName=Order, type=EQUALS]
LIMIT	**Type** Number **Description** Maximum number of rows to return for a query. Corresponds to `LIMIT` in SOQL queries. **Example** 200
MESSAGE	**Type** String **Description** Error or warning message associated with the failed call. **Example** System.UnexpectedException: Query is either selecting too many fields or the filter conditions are too complicated
OFFSET	**Type** Number **Description** Number of rows to skip when paging through a result set. Corresponds to `OFFSET` in SOQL queries.

Field	Details
	Example 0 (default)
`ORDERBY`	**Type** String **Description** Field or column to use for sorting query results, and whether to sort the results in ascending (default) or descending order. Corresponds to `ORDER BY` in SOQL queries. **Examples** (Order:[columnName=OrderDate, direction=ASCENDING, tableName=Order])
`ORGANIZATION_ID`	**Type** Id **Description** 15-character ID of the organization. **Example** 00D000000000123
`REQUEST_ID`	**Type** String **Description** Unique ID of a transaction. A transaction can contain one or more events. All events in a transaction have the same REQUEST_ID. **Example** 4A13-HSKv3CKs-0FKfceaV
`ROWS`	**Type** Number **Description** Total number of records in the result set. The value is always -1 if the custom adapter's `DataSource.Provider` class doesn't declare the `QUERY_TOTAL_SIZE` capability. **Example** 200
`ROWS_FETCHED`	**Type** Number **Description** Number of rows fetched by the callout. Available in API version 42.0 and later. **Example** 200

Field	Details
SELECT	**Type** String **Description** Comma-separated list of fields being queried. Corresponds to `SELECT` in SOQL queries. **Example** (ColumnSelection:[aggregation=NONE, columnName=Name, tableName=Order], ColumnSelection:[aggregation=NONE, columnName=CustomerID, tableName=Order], ColumnSelection:[aggregation=NONE, columnName=OrderDate, tableName=Order])
STATUS	**Type** Boolean **Description** Whether the query was successful. **Possible Values** • 1—Success • 0—Failed • Empty—Failed with no logged status or message
THROUGHPUT	**Type** Number **Description** Number of records retrieved in one second. **Example** 302.57
TIMESTAMP	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
SUBQUERIES	**Type** Number **Description** Reserved for future use.
TIMESTAMP_DERIVED	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`).

Field	Details
	For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`TOTAL_MS`	**Type** Number **Description** How long it took (in milliseconds) to prepare and execute the query and to retrieve the query results. **Example** 709
`USER_ID`	**Type** Id **Description** 15-character ID of the user accessing the external system. **Example** 00530000009M943

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

External OData Callout Event Type

External OData Callout events represent external data callouts via the OData 2.0 and OData 4.0 adapters for Salesforce Connect. This event type is available in the EventLogFile object in API version 40.0 and later.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer Guide.

Fields

Field	Details
`ACTION`	**Type** String **Description** Action performed by the callout. **Possible Values** • query • upsert • delete

Field	Details
BYTES	**Type** Number **Description** Size of the result set in bytes.
ENTITY	**Type** String **Description** Name of the external object being accessed. **Example** Order
EVENT_TYPE	**Type** String **Description** Type of event. Value is always `ExternalODataCallout`.
EXECUTE_MS	**Type** Number **Description** How long it took (in milliseconds) for Salesforce to prepare and execute the query. Available in API version 42.0 and later. **Example** 21
EXPAND	**Type** String **Description** Reserved for future use.
FETCH_MS	**Type** Number **Description** How long it took (in milliseconds) to retrieve the query results from the external system. Available in API version 42.0 and later. **Example** 127
FILTER	**Type** Text

Field	Details
	Description Field expressions to filter which rows to return. Corresponds to `WHERE` in SOQL queries and `$filter` in OData queries. **Example** CustomerID eq 12345
`LIBRARY`	**Type** String **Description** Reserved for future use.
`LIMIT`	**Type** Number **Description** Maximum number of rows to return for a query. Corresponds to `LIMIT` in SOQL queries and `$top` in OData queries. **Example** 200
`MESSAGE`	**Type** String **Description** Error or warning message associated with the failed call. **Example** The OData query result was too large, so the external data didn't load.
`NEXT_LINK`	**Type** String **Description** OData next link that the callout used to request a subsequent page of rows. A next link is provided in a previous response from the OData producer when the response includes only part of the result set. Available in API version 42.0 and later. However, this field isn't supported for the OData 2.0 adapter on orgs created before Spring '18. **Example** http://services.example.org/Warehouse.svc/Orders?$count=true&$select=CustomerID,OrderID,RequiredDate,ShippedDate&$top=301&$skiptoken=10447
`OFFSET`	**Type** Number **Description** Number of rows to skip when paging through a result set.

Field	Details
	Corresponds to `OFFSET` in SOQL queries and `$skip` in OData queries. **Example** 10
`ORDERBY`	**Type** String **Description** Field or column to use for sorting query results, and whether to sort the results in ascending (default) or descending order. Corresponds to `ORDER BY` in SOQL queries and `$orderby` in OData queries. **Examples** • ShipName • ShipName desc
`ORGANIZATION_ID`	**Type** Id **Description** 15-character ID of the organization. **Example** 00D000000000123
`PARENT_CALLOUT`	**Type** String **Description** If the callout requested a subsequent page of rows, this field identifies the initial callout whose request resulted in the multi-page result set. Available in API version 42.0 and later. However, this field isn't supported for the OData 2.0 adapter on orgs created before Spring '18. **Example** 4EoZtuBzzRIXSk-ysRdf1F-1
`PROVIDER_TYPE`	**Type** String **Description** Whether the OData 2.0 or OData 4.0 adapter made the callout. **Possible Values** • OData—OData 2.0 adapter • OData4—OData 4.0 adapter
`RATE_LIMIT_USAGE_PERCENT`	**Type** Number

Field	Details
	Description Consumed percentage of the org's limit of OData callouts per hour. **Example** 2.5—2.5% of the hourly callout limit has been consumed
`REQUEST_ID`	**Type** String **Description** Unique ID of a transaction. A transaction can contain one or more events. All events in a transaction have the same REQUEST_ID. **Example** 4A13-HSKv3CKs-0FKfceaV
`REQUESTS`	**Type** Number **Description** Reserved for future use.
`ROWS`	**Type** Number **Description** Total number of records in the result set. Available in API version 42.0 and later. **Example** 830
`ROWS_FETCHED`	**Type** Number **Description** Number of records fetched by the callout. The records fetched by a callout can be a subset of a large result set. Available in API version 42.0 and later. However, this field isn't supported for the OData 2.0 adapter on orgs created before Spring '18. **Example** 200
`SEARCH`	**Type** String **Description** Search query string. Corresponds to condition expressions in SOSL. **Example** contains(CustomerID,'10248') eq true or contains(ShipName,'10248') eq true

Field	Details
SELECT	**Type** String **Description** Comma-separated list of fields being queried. Corresponds to `SELECT` in SOQL queries and `$select` in OData queries. **Example** CustomerID,OrderDate,OrderID,ShipCity,ShipCountry
STATUS	**Type** Boolean **Description** Whether the query was successful. **Possible Values** • 1—Success • 0—Failed
THROUGHPUT	**Type** Number **Description** Number of records retrieved in one second. Available in API version 42.0 and later. However, this field isn't supported for the OData 2.0 adapter on orgs created before Spring '18. **Example** 3025.67
TIMESTAMP	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
TIMESTAMP_DERIVED	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
TOTAL_MS	**Type** Number

Field	Details
	Description How long it took (in milliseconds) to prepare and execute the query and to retrieve the query results.
USER_ID	**Type** Id **Description** 15-character ID of the user accessing the external system. **Example** 00530000009M943

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Insecure External Assets Event Type

Insecure External Assets events contain information about external assets. External assets include images or videos accessed by users over an insecure HTTP protocol. The event lists all your Salesforce pages that contain assets hosted insecurely on third-party sites that users loaded with a Chrome, Firefox, Microsoft Edge, or Safari browser. The INSECURE_URI field contains the URI being used to load the asset insecurely. The Insecure External Assets event type is available in the EventLogFile object in API version 42.0 and later.

Assets over HTTP can be manipulated through man-in-the-middle and other types of attacks. These attacks can trick users into sending their Salesforce credentials to malicious sites. Always use HTTPS in your custom code and templates for any asset you're loading from external sites.

For details about event monitoring, see the Trailhead Event Monitoring module or the REST API Developer's Guide.

Fields

Field	Details
ASSET_TYPE	**Type** String **Description** Type of insecure asset. **Possible Values** • Base URI • Connect • Font • Frame Ancestor: External page that embeds the Salesforce page in an iframe • Frame • Image

Field	Details
	• `Media` • `Object` • `Other` • `Plugin Types` • `Script` • `Style`
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: `96.43.144.26`.
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.
`DOCUMENT_URI`	**Type** String **Description** URL of the page that contains the insecure asset, excluding the query parameter. **Example** https://company.my.salesforce.com/00XXXXXXXXX
`EVENT_TYPE`	**Type** String **Description** The type of event. The value is always `InsecureExternalAssets`.
`INSECURE_URI`	**Type** String **Description** Insecure external asset URL being used to load an asset insecurely. For example, loading Javascript libraries using **`http:`**`//ajax.googleapis.com/` in your custom code will log an Insecure External Asset Event with the `INSECURE_URI` field set to this URL. Find this reference in your code and update it to use **`https:`**`//ajax.googleapis.com/` instead. **Example** http://pbs.twimg.com/profile_images/5699091412070816/Z4Stwts_normal.jpeg

Field	Details
LOGIN_KEY	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: GeJCsym5eyvtEK2I.
ORGANIZATION_ID	**Type** String **Description** The 15-character ID of the org. **Example** 00D000000000123
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. For example: 3nWgxWbDKWWDIk0FKfF5DV.
RUN_TIME	**Type** Number **Description** The amount of time that the request took in milliseconds.
SESSION_KEY	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For example: d7DEq/ANa7nNZZVD.
TIMESTAMP	**Type** String **Description** The access time of Salesforce services in GMT. For example: 20130715233322.670.
TIMESTAMP_DERIVED	**Type** DateTime

Field	Details
	Description The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`TYPE`	**Type** String **Description** Type of Salesforce page. **Possible Values** • `Appserver`: Page without My Domain subdomain (for example, https://na44.salesforce.com) • `Communities`: Customer Experience Cloud site • `Email`: Email preview • `Login`: Login page (for example, https://login.salesforce.com) • `Mydomain`: Page on My Domain subdomain (for example, https://mycompany.my.salesforce.com) • `Sites`: Customer site • `Static`: Static content (for example, https://sfdcstatic.com) • `Unknown`: other type of page
`UNIQUE_ID`	**Type** String **Description** The 32-character ID of the event log file in which the insecure external asset event data is found. **Example** 44e128a5-ac7a-4c9a-be4c-224b6bf81b20
`URI`	**Type** String **Description** The URI of the page that's receiving the request. For example: `/home/home.jsp`.
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.

Field	Details
USER_ID	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: 00530000009M943
USER_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: 0059000000I1SNIA0.

Usage

UNIQUE_ID is used by Salesforce Customer Support to troubleshoot any issues that occur.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Knowledge Article View Event Type

Knowledge Article View events contain user activity with your knowledge base.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
ARTICLE_ID	**Type** Id **Description** The 15-character ID of the article. For example: 00Dxx0000001gEb.
ARTICLE_STATUS	**Type** Character **Description** Possible values are: • D—Draft

	• `O`—Online • `A`—Archived
`ARTICLE_VERSION`	**Type** Number **Description** Article version number. For example: `2`.
`ARTICLE_VERSION_ID`	**Type** Id **Description** The 15-character ID of the article version. For example: `ka0R00000005rt6`.
`CONTEXT`	**Type** String **Description** Context of the request. **Description** Possible values are: • `Apex` • `API` • empty string
`ENTITY`	**Type** String **Description** Entity requested. For example: `Knowledge__kav`.
`EVENT_TYPE`	**Type** String **Description** The type of event. The value is always `KnowledgeArticleView`.
`LANGUAGE`	**Type** String **Description** iso-code of the language. For example: `en_US`/

	Example
LAST_VERSION	**Type** Boolean **Description** True if it is the last version. Possible values are: • True • False
ORGANIZATION_ID	**Type** Id **Description** The 15-character ID of the organization. For example: 00D000000000123. **Example**
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. For example: 3nWgxWbDKWWDIk0FKfF5DV.
SESSION_ID	**Type** String **Description** Session ID of the request. For example: gV7pCSW2vGaaJNFi3GSpuPIjNbKVbSxRvx34LJsIvuc=. **Example**
TIMESTAMP	**Type** String **Description** The access time of Salesforce services in GMT. For example: 20130715233322.670.
TIMESTAMP_DERIVED	**Type** DateTime

	Description The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
`USER_TYPE`	**Type** Character **Description** User type of the request. Possible values are: • `A`—App • `C`—Customer Portal • `P`—Partner Portal • `G`—guest •

Lightning Error Event Type

Lightning Error events represent errors that occurred during user interactions with Lightning Experience and the Salesforce mobile app. This event type is available in the EventLogFile object in API version 39.0 and later.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`APP_NAME`	**Type** String **Description** The name of the application that the user accessed.
`BROWSER_NAME`	**Type** String

Field	Details
	Description The name of the browser that the user accessed. **Example** Chrome, IE, Safari, Gecko
`BROWSER_VERSION`	**Type** String **Description** The version of the browser that the user accessed in `major.minor version` format. Some browsers don't provide a minor version.
`CLIENT_GEO`	**Type** String **Description** The geolocation of the client in the form of <Country>/<State|Province>. **Example** United States/California
`CLIENT_ID`	**Type** String **Description** The API client ID.
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: `96.43.144.26`.
`COMPONENT_NAME`	**Type** String **Description** The internal name of the standard component that generated the error. The Salesforce developer assigned the name when the standard component was created. **Examples** • SaveEdit • Lead.CCPM_sendSMS • ChangeOwnerOne

Field	Details
CONNECTION_TYPE	**Type** String **Description** The type of connection. **Possible Values** • CDMA1x • CDMA • EDGE • EVDO0 • EVDOA • EVDOB • GPRS • HRPD • HSDPA • HSUPA • LTE • WIFI
DEVICE_ID	**Type** String **Description** The unique identifier used to identify a device when tracking events. DEVICE_ID is a generated value that's created when the mobile app is initially run after installation.
DEVICE_MODEL	**Type** String **Description** The name of the device model. **Example** iPad, iPhone
DEVICE_PLATFORM	**Type** String **Description** The type of application experience in name:experience:form format. **Possible Values** Name • APP_BUILDER • CUSTOM • S1

Field	Details
	• `SFX` Experience • `BROWSER` • `HYBRID` Form • `DESKTOP` • `PHONE` • `TABLET`
`DEVICE_SESSION_ID`	**Type** Id **Description** The unique identifier of the user's session based on page load time. If the user reloads a page, it starts a new session. **Example** 321a1ddfaf924803a075f1e69fc87bc06f53ccd0
`EVENT_TYPE`	**Type** String **Description** The type of event. The value is always `LightningError`.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
`ORGANIZATION_ID`	**Type** String **Description** The 15-character ID of the org. **Example** 00D000000000123
`OS_NAME`	**Type** String **Description** The operating system name, derived from `USER_AGENT`.

Field	Details
	Example Android, iOS, OSX, Windows
`OS_VERSION`	**Type** String **Description** The operating system version, derived from `USER_AGENT`.
`PAGE_APP_NAME`	**Type** String **Description** The internal name of the application that the user accessed from the App Launcher. **Example** LightningSales
`PAGE_CONTEXT`	**Type** String **Description** Context of the page where the event occurred. **Example** clients:cardsContainer
`PAGE_ENTITY_ID`	**Type** Id **Description** The unique entity identifier of the event. **Example** 0013000000I3zJAAAZ
`PAGE_ENTITY_TYPE`	**Type** String **Description** The entity type of the event. **Example** Task, Account
`PAGE_START_TIME`	**Type** Number **Description** The time when the page was initially loaded, measured in milliseconds. **Example** 1471564788642

Field	Details
PAGE_URL	**Type** String **Description** Relative URL of the top-level Lightning Experience or Salesforce mobile app page that the user opened. The page can contain one or more Lightning components. Multiple record IDs can be associated with PAGE_URL. **Example** /sObject/0064100000JXITSAA5/view
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. **Example** 3nWgxWbDKWWDIk0FKfF5DV
SDK_APP_TYPE	**Type** String **Description** The mobile SDK application type. **Possible Values** • HYBRID • HYBRIDLOCAL • HYBRIDREMOTE • NATIVE • REACTNATIVE
SDK_APP_VERSION	**Type** String **Description** The mobile SDK application version number. **Example** 5.0
SDK_VERSION	**Type** String **Description** The mobile SDK version number. **Example** 2.1.0

Field	Details
SESSION_KEY	**Type** String **Description** The user's unique session ID. You can use this value to identify all events in Lightning Experience within a session. When a user logs out and logs in again, a new session is started. **Example** cdd09305cb6babf34059e27f70e47f1b11dec868
TIMESTAMP	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
TIMESTAMP_DERIVED	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
UI_EVENT_ID	**Type** String **Description** ID of the Lightning event type. **Possible Values** • `ltng:error` • `ltng:interaction` • `ltng:pageView` • `ltng:performance`
UI_EVENT_SEQUENCE_NUM	**Type** Number **Description** An auto-incremented sequence number of the current event since the session started.
UI_EVENT_SOURCE	**Type** String **Description** The source of the error event.

Field	Details
	Examples Here are some examples of error flags returned in this field. • AuraError • Error • InvalidStateError • RangeError • ReferenceError • SecurityError • SyntaxError • TypeError • unknown
UI_EVENT_TIMESTAMP	**Type** Number **Description** The time at which this event occurred, measured in milliseconds. **Example** 1479769912796
UI_EVENT_TYPE	**Type** String **Description** The type of interaction. **Examples** • crud — Created, read, updated, or deleted the record. • reads — Read multiple records.
USER_AGENT	**Type** String **Description** The numeric code for the type of client used to make the request (for example, browser, application, or API) as a string.
USER_ID	**Type** String **Description** The 15-character ID of the user accessing Salesforce services through the UI or API. **Example** 00530000009M943

Field	Details
USER_ID_DERIVED	**Type** Id **Description** The 18-character case-insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** 00590000000I1SNIA0
USER_TYPE	**Type** String **Description** The category of user license of the user accessing Salesforce services through the UI or API. **Possible Values** • A: Automated Process • b: High Volume Portal • C: Customer Portal User • D: External Who • F: Self Service • G: Guest • L: Package License Manager • N: Salesforce to Salesforce • n: CSN Only • O: Power Custom • o: Custom • P: Partner • p: Customer Portal Manager • S: Standard • X: Salesforce Administrator

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Lightning Interaction Event Type

Lightning Interaction events track user actions in Lightning Experience and the Salesforce mobile app, such as the user clicking, tapping, or scrolling on a page. This event type is available in the EventLogFile object in API version 39.0 and later.

Warning: The Lightning Interaction Event type is a best effort logging of user interactions but is not intended to meet privacy and security audit requirements. Not all interactions or CRUD operations are tracked and data loss may occur.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
APP_NAME	**Type** String **Description** The name of the application that the user accessed.
BROWSER_NAME	**Type** String **Description** The name of the browser that the user accessed. **Example** Chrome, IE, Safari, Gecko
BROWSER_VERSION	**Type** String **Description** The version of the browser that the user accessed in `major.minor version` format. Some browsers don't provide a minor version.
CLIENT_GEO	**Type** String **Description** The geolocation of the client in the form of <Country>/<State|Province>. **Example** United States/California
CLIENT_ID	**Type** String **Description** The API client ID.
CLIENT_IP	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: `96.43.144.26`.

Field	Details
COMPONENT_NAME	**Type** String **Description** The internal name of the standard component that the user interacted with. The Salesforce developer assigned the name when the standard component was created. **Examples** • SaveEdit • Lead.CCPM_sendSMS • ChangeOwnerOne
CONNECTION_TYPE	**Type** String **Description** The type of connection. **Possible Values** • CDMA1x • CDMA • EDGE • EVDO0 • EVDOA • EVDOB • GPRS • HRPD • HSDPA • HSUPA • LTE • WIFI
DEVICE_ID	**Type** String **Description** The unique identifier used to identify a device when tracking events. DEVICE_ID is a generated value that's created when the mobile app is initially run after installation.
DEVICE_MODEL	**Type** String **Description** The name of the device model. **Example** iPad, iPhone

Field	Details
DEVICE_PLATFORM	**Type** String **Description** The type of application experience in name:experience:form format. **Possible Values** Name • APP_BUILDER • CUSTOM • S1 • SFX Experience • BROWSER • HYBRID Form • DESKTOP • PHONE • TABLET
DEVICE_SESSION_ID	**Type** Id **Description** The unique identifier of the user's session based on page load time. When the user reloads a page, a new session is started. **Example** 321a1ddfaf924803a075f1e69fc87bc06f53ccd0
DURATION	**Type** Number **Description** The duration in milliseconds since the page start time. Warning: This field is being deprecated.
EVENT_TYPE	**Type** String **Description** The type of event. The value is always LightningInteraction.
GRANDPARENT_UI_ELEMENT	**Type** String

Field	Details
	Description Grandparent scope of the page element where the event occurred.
LOGIN_KEY	**Type** String **Description** The string that ties together all events in a user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
ORGANIZATION_ID	**Type** String **Description** The 15-character ID of the org. **Example** 00D000000000123
OS_NAME	**Type** String **Description** The operating system name, derived from USER_AGENT. **Example** Android, iOS, OSX, Windows
OS_VERSION	**Type** String **Description** The operating system version, derived from USER_AGENT.
PAGE_APP_NAME	**Type** String **Description** The internal name of the application that the user accessed from the App Launcher. **Example** LightningSales
PAGE_CONTEXT	**Type** String **Description** Context of the page where the event occurred.

Field	Details
	Example clients:cardsContainer
PAGE_ENTITY_ID	**Type** Id **Description** The unique entity identifier of the event. **Example** 0013000000I3zJAAAZ
PAGE_ENTITY_TYPE	**Type** String **Description** The entity type of the event. **Example** Task, contacts
PAGE_START_TIME	**Type** Number **Description** The time when the page was initially loaded, measured in milliseconds. **Example** 1471564788642
PAGE_URL	**Type** String **Description** Relative URL of the top-level Lightning Experience or Salesforce mobile app page that the user opened. The page can contain one or more Lightning components. Multiple record IDs can be associated with PAGE_URL. **Example** /sObject/0064100000JXITSAA5/view
PARENT_UI_ELEMENT	**Type** String **Description** Parent scope of the page element where the event occurred.
RECORD_ID	**Type** String array

Field	Details
	Description The IDs of one or more records that the user interacted with. For more information on the user interaction, see `UI_EVENT_TYPE` and `UI_EVENT_SOURCE` fields. **Example** ["5004100000JaGGLAA3", "5004100000Dn79CAAR", "50041000007KeugAAC"]
`RECORD_TYPE`	**Type** String **Description** The type of record object that the user interacted with. **Examples** • Account • Opportunity
`RELATED_LIST`	**Type** String **Description** The type of related list that the user clicked. **Example** Opportunity
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. **Example** 3nWgxWbDKWWDIk0FKfF5DV
`SDK_APP_TYPE`	**Type** String **Description** The mobile SDK application type. **Possible Values** • `HYBRID` • `HYBRIDLOCAL` • `HYBRIDREMOTE` • `NATIVE` • `REACTNATIVE`

Field	Details
SDK_APP_VERSION	**Type** String **Description** The mobile SDK application version number. **Example** 5.0
SDK_VERSION	**Type** String **Description** The mobile SDK version number. **Example** 2.1.0
SESSION_KEY	**Type** String **Description** The user's unique session ID. You can use this value to identify all events in Lightning Experience within a session. When the user logs out and logs in again, a new session is started. **Example** cdd09305cb6babf34059e27f70e47f1b11dec868
TARGET_UI_ELEMENT	**Type** String **Description** The target page element where the event occurred. **Example** label bBody truncate, tabitem-link
TIMESTAMP	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
TIMESTAMP_DERIVED	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`).

Field	Details
	For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`UI_EVENT_ID`	**Type** String **Description** Id of the Lightning event type. **Possible Values** • `ltng:error` • `ltng:interaction` • `ltng:pageView` • `ltng:performance`
`UI_EVENT_SEQUENCE_NUM`	**Type** Number **Description** An auto-incremented sequence number of the current event since the session started.
`UI_EVENT_SOURCE`	**Type** String **Description** The user action on the record or records in `RECORD_ID`. This field's value indicates whether the user's action was on a single record or multiple records. For example, `read` indicates that one record was read (such as on a record detail page); `reads` indicates that multiple records were read (such as in a list view). **Examples** • click • create • delete • hover • read • update
`UI_EVENT_TIMESTAMP`	**Type** Number **Description** The time at which this event occurred, measured in milliseconds. **Example** 1479769912796
`UI_EVENT_TYPE`	**Type** String

Field	Details
	Description The type of interaction with the records in `RECORD_ID`. **Examples** • crud — Created, read, updated, or deleted the record. • reads — Read multiple records.
`USER_AGENT`	**Type** String **Description** The numeric code for the type of client used to make the request (for example, the browser, application, or API) as a string.
`USER_ID`	**Type** String **Description** The 15-character ID of the user accessing Salesforce services through the UI or API. **Example** 00530000009M943
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case-insensitive ID of the user who’s using Salesforce services through the UI or the API. **Example** 00590000000I1SNIA0
`USER_TYPE`	**Type** String **Description** The category of user license of the user accessing Salesforce services through the UI or API. **Possible Values** • `A`: Automated Process • `b`: High Volume Portal • `C`: Customer Portal User • `D`: External Who • `F`: Self Service • `G`: Guest • `L`: Package License Manager • `N`: Salesforce to Salesforce

Field	Details
	• `n`: CSN Only • `O`: Power Custom • `o`: Custom • `P`: Partner • `p`: Customer Portal Manager • `S`: Standard • `X`: Salesforce Administrator

SEE ALSO:
EventLogFile Supported Event Types
EventLogFile

Lightning Page View Event Type

Lightning Page View events represent information about the page on which the event occurred in Lightning Experience and the Salesforce mobile app. A Lightning Page View event tracks the page a user visited, how long the user spent on the page, and the load time for the page. This event type is available in the EventLogFile object in API version 39.0 and later.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`APP_NAME`	**Type** String **Description** The name of the application that the user accessed.
`BROWSER_NAME`	**Type** String **Description** The name of the browser that the user accessed. **Example** Chrome, IE, Safari, Gecko
`BROWSER_VERSION`	**Type** String **Description** The version of the browser that the user accessed in `major.minor version` format. Some browsers don't provide a minor version.

Field	Details
CLIENT_GEO	**Type** String **Description** The geolocation of the client in the form of <Country>/<State|Province>. **Example** United States/California
CLIENT_ID	**Type** String **Description** The API client ID.
CLIENT_IP	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: `96.43.144.26`.
CONNECTION_TYPE	**Type** String **Description** The type of connection. **Possible Values** • `CDMA1x` • `CDMA` • `EDGE` • `EVDO0` • `EVDOA` • `EVDOB` • `GPRS` • `HRPD` • `HSDPA` • `HSUPA` • `LTE` • `WIFI`
DEVICE_ID	**Type** String

Field	Details
	Description The unique identifier used to identify a device when tracking events. `DEVICE_ID` is a generated value that's created when the mobile app is initially run after installation.
`DEVICE_MODEL`	**Type** String **Description** The name of the device model. **Example** iPad, iPhone
`DEVICE_PLATFORM`	**Type** String **Description** The type of application experience in `name:experience:form` format. **Possible Values** Name • `APP_BUILDER` • `CUSTOM` • `S1` • `SFX` Experience • `BROWSER` • `HYBRID` Form • `DESKTOP` • `PHONE` • `TABLET`
`DEVICE_SESSION_ID`	**Type** Id **Description** The unique identifier of the user's session based on page load time. When the user reloads a page, a new session is started. **Example** 321a1ddfaf924803a075f1e69fc87bc06f53ccd0
`DURATION`	**Type** Number

Field	Details
	Description The duration in milliseconds since the page start time. Warning: This field is being deprecated. Use `EFFECTIVE_PAGE_TIME` instead.
`EFFECTIVE_PAGE_TIME`	**Type** Number **Description** Indicates how many milliseconds it took for the page to load before a user could interact with the page's functionality. Multiple factors can affect effective page time, such as network speed, hardware performance, or page complexity. If an effective page time greater than 60 seconds is detected, the value of this field is set to null.
`EVENT_TYPE`	**Type** String **Description** The type of event. The value is always `LightningPageView`.
`GRANDPARENT_UI_ELEMENT`	**Type** String **Description** The grandparent scope of the page element where the event occurred.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
`ORGANIZATION_ID`	**Type** String **Description** The 15-character ID of the org. **Example** 00D000000000123
`OS_NAME`	**Type** String **Description** The operating system name, derived from `USER_AGENT`.

Field	Details
	Example Android, iOS, OSX, Windows
OS_VERSION	**Type** String **Description** The operating system version, derived from USER_AGENT.
PAGE_APP_NAME	**Type** String **Description** The internal name of the application that the user accessed from the App Launcher. **Example** LightningSales
PAGE_CONTEXT	**Type** String **Description** The context of the page where the event occurred. **Example** clients:cardsContainer
PAGE_ENTITY_ID	**Type** Id **Description** The unique entity identifier of the event. **Example** 0013000000I3zJAAAZ
PAGE_ENTITY_TYPE	**Type** String **Description** The entity type of the event. **Example** Task, contacts
PAGE_START_TIME	**Type** Number **Description** The time when the page was initially loaded, measured in milliseconds. **Example** 1471564788642

Field	Details
PAGE_URL	**Type** String **Description** Relative URL of the top-level Lightning Experience or Salesforce mobile app page that the user opened. The page can contain one or more Lightning components. Multiple record IDs can be associated with PAGE_URL. **Example** /sObject/0064100000JXITSAA5/view
PARENT_UI_ELEMENT	**Type** String **Description** The parent scope of the page element where the event occurred.
PREVPAGE_APP_NAME	**Type** String **Description** The internal name of the previous application that the user accessed from the App Launcher. **Example** LightningSales
PREVPAGE_CONTEXT	**Type** String **Description** The context of the previous page where the event occurred. **Example** clients:cardsContainer
PREVPAGE_ENTITY_ID	**Type** Id **Description** The unique previous page entity identifier of the event.
PREVPAGE_ENTITY_TYPE	**Type** String **Description** The previous page entity type of the event. **Example** Task, contacts
PREVPAGE_URL	**Type** String

Field	Details
	Description The relative URL of the previous Lightning Experience or Salesforce mobile app page that the user opened. **Example** /sObject/006410000
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. **Example** 3nWgxWbDKWWDIk0FKfF5DV
SDK_APP_TYPE	**Type** String **Description** The mobile SDK application type. **Possible Values** • HYBRID • HYBRIDLOCAL • HYBRIDREMOTE • NATIVE • REACTNATIVE
SDK_APP_VERSION	**Type** String **Description** The mobile SDK application version number. **Example** 5.0
SDK_VERSION	**Type** String **Description** The mobile SDK version number. **Example** 2.1.0
SESSION_KEY	**Type** String

Field	Details
	Description The user's unique session ID. You can use this value to identify all events in Lightning Experience within a session. When the user logs out and logs in again, a new session is started. **Example** cdd09305cb6babf34059e27f70e47f1b11dec868
`TARGET_UI_ELEMENT`	**Type** String **Description** The target page element where the event occurred. **Example** label bBody truncate, tabitem-link
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`UI_EVENT_ID`	**Type** String **Description** Id of the Lightning event type. **Possible Values** • `ltng:error` • `ltng:interaction` • `ltng:pageView` • `ltng:performance`
`UI_EVENT_SEQUENCE_NUM`	**Type** Number **Description** An auto-incremented sequence number of the current event since the session started.

Field	Details
UI_EVENT_SOURCE	**Type** String **Description** This field is being deprecated and is mostly null, except in mobile app views where it indicates the page type of views where the context is "native."
UI_EVENT_TIMESTAMP	**Type** Number **Description** The time at which this event occurred, measured in milliseconds. **Example** 1479769912796
USER_AGENT	**Type** String **Description** The numeric code for the type of client used to make the request (for example, the browser, application, or API) as a string.
USER_ID	**Type** String **Description** The 15-character ID of the user accessing Salesforce services through the UI or API. **Example** 00530000009M943
USER_ID_DERIVED	**Type** Id **Description** The 18-character case-insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** 00590000000I1SNIA0
USER_TYPE	**Type** String **Description** The category of user license of the user accessing Salesforce services through the UI or API. **Possible Values** • A: Automated Process • b: High Volume Portal

Field	Details
	• C: Customer Portal User • D: External Who • F: Self Service • G: Guest • L: Package License Manager • N: Salesforce to Salesforce • n: CSN Only • O: Power Custom • o: Custom • P: Partner • p: Customer Portal Manager • S: Standard • X: Salesforce Administrator

SEE ALSO:
EventLogFile Supported Event Types
EventLogFile

Lightning Performance Event Type

Lightning Performance events track trends in Lightning Experience and Salesforce mobile app performance. This event type is available in the EventLogFile object in API version 39.0 and later.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
APP_NAME	**Type** String **Description** The name of the application that the user accessed.
BROWSER_NAME	**Type** String **Description** The name of the browser that the user accessed. **Example** Chrome, IE, Safari, Gecko

<table>
<tr><th>Field</th><th>Details</th></tr>
<tr><td><code>BROWSER_VERSION</code></td><td>Type
String
Description
The version of the browser that the user accessed in <code>major.minor version</code> format. Some browsers don’t provide a minor version.</td></tr>
<tr><td><code>CLIENT_GEO</code></td><td>Type
String
Description
The geolocation of the client in the form of <Country>/<State|Province>.
Example
United States/California</td></tr>
<tr><td><code>CLIENT_ID</code></td><td>Type
String
Description
The API client ID.</td></tr>
<tr><td><code>CLIENT_IP</code></td><td>Type
String
Description
The IP address of the client that’s using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as “Salesforce.com IP”.
For example: <code>96.43.144.26</code>.</td></tr>
<tr><td><code>CONNECTION_TYPE</code></td><td>Type
String
Description
The type of connection.
Possible Values
<code>CDMA1x</code>
<code>CDMA</code>
<code>EDGE</code>
<code>EVDO0</code>
<code>EVDOA</code>
<code>EVDOB</code>
<code>GPRS</code>
<code>HRPD</code>
<code>HSDPA</code>
<code>HSUPA</code></td></tr>
</table>

Field	Details
	• LTE • WIFI
DEVICE_ID	**Type** String **Description** The unique identifier used to identify a device when tracking events. DEVICE_ID is a generated value that's created when the mobile app is initially run after installation.
DEVICE_MODEL	**Type** String **Description** The name of the device model. **Example** iPad, iPhone
DEVICE_PLATFORM	**Type** String **Description** The type of application experience in name:experience:form format. **Possible Values** Name • APP_BUILDER • CUSTOM • S1 • SFX Experience • BROWSER • HYBRID Form • DESKTOP • PHONE • TABLET
DEVICE_SESSION_ID	**Type** Id **Description** The unique identifier of the user's session based on page load time. When the user reloads a page, a new session is started.

Field	Details
	Example 321a1ddfaf924803a075f1e69fc87bc06f53ccd0
DURATION	**Type** Number **Description** The duration in milliseconds since the page start time.
EVENT_TYPE	**Type** String **Description** The type of event. The value is always LightningPerformance.
LOGIN_KEY	**Type** String **Description** The string that ties together all events in a user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
ORGANIZATION_ID	**Type** String **Description** The 15-character ID of the org. **Example** 00D000000000123
OS_NAME	**Type** String **Description** The operating system name, derived from USER_AGENT. **Example** Android, iOS, OSX, Windows
OS_VERSION	**Type** String **Description** The operating system version, derived from USER_AGENT.
PAGE_START_TIME	**Type** Number

Field	Details
	Description The time when the page was initially loaded, measured in milliseconds. **Example** 1471564788642
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. **Example** 3nWgxWbDKWWDIk0FKfF5DV
SDK_APP_TYPE	**Type** String **Description** The mobile SDK application type. **Possible Values** • HYBRID • HYBRIDLOCAL • HYBRIDREMOTE • NATIVE • REACTNATIVE
SDK_APP_VERSION	**Type** String **Description** The mobile SDK application version number. **Example** 5.0
SDK_VERSION	**Type** String **Description** The mobile SDK version number. **Example** 2.1.0
SESSION_KEY	**Type** String

Field	Details
	Description The user's unique session ID. You can use this value to identify all events in Lightning Experience within a session. When the user logs out and logs in again, a new session is started. **Example** cdd09305cb6babf34059e27f70e47f1b11dec868
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`UI_EVENT_ID`	**Type** String **Description** Id of the Lightning event type. **Possible Values** • `ltng:error` • `ltng:interaction` • `ltng:pageView` • `ltng:performance`
`UI_EVENT_SOURCE`	**Type** String **Description** The user action on the record or records. This field's value indicates whether the user's action was on a single record or multiple records. For example, `read` indicates that one record was read (such as on a record detail page); `reads` indicates that multiple records were read (such as in a list view). **Examples** • click • create • delete

Field	Details
	• hover • read • update
UI_EVENT_TIMESTAMP	**Type** Number **Description** The time at which this event occurred, measured in milliseconds. **Example** 1479769912796
UI_EVENT_TYPE	**Type** String **Description** The type of interaction. **Examples** • crud — Created, read, updated, or deleted the record. • reads — Read multiple records.
USER_AGENT	**Type** String **Description** The numeric code for the type of client used to make the request (for example, browser, application, or API) as a string.
USER_ID	**Type** String **Description** The 15-character ID of the user accessing Salesforce services through the UI or API. **Example** 00530000009M943
USER_ID_DERIVED	**Type** Id **Description** The 18-character case-insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** 00590000000I1SNIA0
USER_TYPE	**Type** String

Field	Details
	Description The category of user license of the user accessing Salesforce services through the UI or API. **Possible Values** • `A`: Automated Process • `b`: High Volume Portal • `C`: Customer Portal User • `D`: External Who • `F`: Self Service • `G`: Guest • `L`: Package License Manager • `N`: Salesforce to Salesforce • `n`: CSN Only • `O`: Power Custom • `o`: Custom • `P`: Partner • `p`: Customer Portal Manager • `S`: Standard • `X`: Salesforce Administrator

SEE ALSO:
EventLogFile Supported Event Types
EventLogFile

Login Event Type

Login events contain details about your org's user login history.

Note: Login Event Type is used by EventLogFile (ELF). It is not a real-time event. For the LoginEvent real-time event, which is part of Real-Time Event Monitoring (RTEM), see LoginEvent in the *Platform Events Developer Guide*.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`API_TYPE`	**Type** String **Description** The type of API request. Possible values are:

	• `D`—Apex Class • `E`—SOAP Enterprise • `I`—SOAP Cross Instance • `M`—SOAP Metadata • `O`—Old SOAP • `P`—SOAP Partner • `S`—SOAP Apex • `T`—SOAP Tooling • `X`—XmlRPC • `f`—Feed • `l`—Live Agent • `p`—SOAP ClientSync
`API_VERSION`	**Type** String **Description** The version of the API that's being used. For example: `36.0`.
`AUTHENTICATION_METHOD_REFERENCE`	**Type** String **Description** The authentication method used by a third-party identification provider for an OpenID Connect single sign-on protocol. This field is available in API version 51.0 and later.
`BROWSER_TYPE`	**Type** String **Description** The identifier string returned by the browser used at login. Example values are: • `Go-http-client/1.1` • `Mozilla/5.0 (Macintosh; Intel Mac OS X 10.12; rv%3A50.0) Gecko/20100101 Firefox/50.0` • `Mozilla/5.0 (Macintosh; Intel Mac OS X 10_11_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/51.0.2704.84 Safari/537.36`
`CIPHER_SUITE`	**Type** String

Field	Details
	Description The TLS cipher suite used for the login. Values are OpenSSL-style cipher suite names, with hyphen delimiters. For more information, see OpenSSL Cryptography and SSL/TLS Toolkit.
CPU_TIME	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.
CLIENT_IP	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: `96.43.144.26`.
DB_TOTAL_TIME	**Type** Number **Description** The time in nanoseconds for a database round trip. Includes time spent in the JDBC driver, network to the database, and `DB_CPU_TIME`. Compare this field to `CPU_TIME` to determine whether performance issues are occurring in the database layer or in your own code.
EVENT_TYPE	**Type** String **Description** The type of event. The value is always `Login`.
LOGIN_KEY	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: `GeJCsym5eyvtEK2I`.

LOGIN_STATUS	**Type** String **Description** The status of the login attempt. For successful logins, the value is LOGIN_NO_ERROR. All other values indicate errors or authentication issues. For details, see Login Event Type — LOGIN_STATUS Values on page 1291.
ORGANIZATION_ID	**Type** Id **Description** The 15-character ID of the organization. For example: 00D000000000123. **Example**
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. For example: 3nWgxWbDKWWDIk0FKfF5DV.
REQUEST_STATUS	**Type** String **Description** The status of the request for a page view or user interface action. Possible values are: • S—Success. Salesforce handled the request successfully. If an Apex controller throws an exception, this status is also returned. • F—Failure. Typically 4xx or 5xx HTTP codes, such as no permission to view page, page took too long to render, page is read-only. • U—Undefined • A—Authorization Error • R—Redirect. Typically a 3xx HTTP code, possibly initiated by an Apex controller in a Visualforce page. • N—Not Found. 404 error. **Possible Values**

`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For Login Event Type, this field is usually null because the event is captured before a session is created. **Example** d7DEq/ANa7nNZZVD
`SOURCE_IP`	**Type** IP **Description** The source IP of the login request.
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`TLS_PROTOCOL`	**Type** String **Description** The TLS protocol used for the login. **Example** There are 3 possible values. • 1.0 • 1.1

	• 1.2
`URI`	**Type** String **Description** The URI of the page that's receiving the request. For example: `/home/home.jsp`.
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: `00590000000I1SNIA0`.
`USER_NAME`	**Type** String **Description** The username that's used for login.

Login Event Type — LOGIN_STATUS Values

When users attempt to log in to your org, the success or failure of their login attempts is tracked in event log file data. Specifically, the LOGIN_STATUS field in the Login event type contains the result of these login attempts. The data in LOGIN_STATUS can help you determine whether your users' login attempts were successful. This field is available in the Login event type in the EventLogFile object in API version 39.0 and later.

SEE ALSO:

Login Event Type — LOGIN_STATUS Values
EventLogFile Supported Event Types
EventLogFile

Login Event Type — LOGIN_STATUS Values

When users attempt to log in to your org, the success or failure of their login attempts is tracked in event log file data. Specifically, the LOGIN_STATUS field in the Login event type contains the result of these login attempts. The data in LOGIN_STATUS can help you determine whether your users' login attempts were successful. This field is available in the Login event type in the EventLogFile object in API version 39.0 and later.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

API Error Code	Details (If Available)
LOGIN_CHALLENGE_ISSUED	Failed: Computer activation required
LOGIN_CHALLENGE_PENDING	Failed: Computer activation pending
LOGIN_DATA_DOWNLOAD_ONLY	
LOGIN_END_SESSION_TXN_SECURITY_POLICY	
LOGIN_ERROR_APPEXCHANGE_DOWN	Unable to process your login request
LOGIN_ERROR_ASYNC_USER_CREATE	
LOGIN_ERROR_AVANTGO_DISABLED	
LOGIN_ERROR_AVANTGO_TRIAL_EXP	
LOGIN_ERROR_CLIENT_NO_ACCESS	
LOGIN_ERROR_CLIENT_REQ_UPDATE	Failed: Client update required
LOGIN_ERROR_CSS_FROZEN	
LOGIN_ERROR_CSS_PW_LOCKOUT	
LOGIN_ERROR_DUPLICATE_USERNAME	
LOGIN_ERROR_EXPORT_RESTRICTED	Restricted country
LOGIN_ERROR_GLOBAL_BLOCK_DOMAIN	Restricted domain
LOGIN_ERROR_HT_DOWN	
LOGIN_ERROR_HTP_METHD_INVALID	Failed: Invalid HTTP method

API Error Code	Details (If Available)
LOGIN_ERROR_INSECURE_LOGIN	Failed: Login over insecure channel
LOGIN_ERROR_INVALID_GATEWAY	Invalid gateway
LOGIN_ERROR_INVALID_ID_FIELD	
LOGIN_ERROR_INVALID_PASSWORD	Invalid password
LOGIN_ERROR_LOGINS_EXCEEDED	Maximum logins exceeded
LOGIN_ERROR_MUST_USE_API_TOKEN	Failed: API security token required
LOGIN_ERROR_MUTUAL_AUTHENTICATION	Mutual authentication failed
LOGIN_ERROR_NETWORK_INACTIVE	Invalid - Experience Cloud site offline
LOGIN_ERROR_NO_HT_ACCESS	
LOGIN_ERROR_NO_NETWORK_ACCESS	No Experience Cloud site access
LOGIN_ERROR_NO_NETWORK_INFO	
LOGIN_ERROR_NO_PORTAL_ACCESS	Invalid profile association
LOGIN_ERROR_NO_SET_COOKIES	
LOGIN_ERROR_OFFLINE_DISABLED	Offline disabled
LOGIN_ERROR_OFFLINE_TRIAL_EXP	Offline trial expired
LOGIN_ERROR_ORG_CLOSED	Organization closed
LOGIN_ERROR_ORG_DOMAIN_ONLY	Restricted domain
LOGIN_ERROR_ORG_IN_MAINTENANCE	Organization is in maintenance
LOGIN_ERROR_ORG_INACTIVE	Organization is inactive
LOGIN_ERROR_ORG_IS_DOT_ORG	Organization is a DOT
LOGIN_ERROR_ORG_LOCKOUT	Organization locked
LOGIN_ERROR_ORG_SIGNING_UP	
LOGIN_ERROR_ORG_SUSPENDED	Organization suspended
LOGIN_ERROR_OUTLOOK_DISABLED	Outlook integration disabled
LOGIN_ERROR_PAGE_REQUIRES_LOGIN	
LOGIN_ERROR_PASSWORD_EMPTY	
LOGIN_ERROR_PASSWORD_LOCKOUT	Password lockout
LOGIN_ERROR_PORTAL_INACTIVE	Invalid - Portal disabled
LOGIN_ERROR_RATE_EXCEEDED	Login rate exceeded
LOGIN_ERROR_RESTRICTED_DOMAIN	Restricted IP

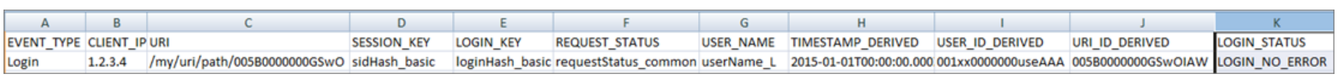
API Error Code	Details (If Available)
LOGIN_ERROR_RESTRICTED_TIME	Restricted time
LOGIN_ERROR_SESSION_TIMEOUT	
LOGIN_ERROR_SSO_PWD_INVALID	Invalid password
LOGIN_ERROR_SSO_SVC_DOWN	Your company's authentication service is down
LOGIN_ERROR_SSO_URL_INVALID	The Single Sign-On Gateway URL is invalid
LOGIN_ERROR_STORE	
LOGIN_ERROR_STORE_DOWN	
LOGIN_ERROR_SWITCH_SFDC_INSTANCE	
LOGIN_ERROR_SWITCH_SFDC_LOGIN	
LOGIN_ERROR_SYNCOFFLINE_DISBLD	Failed: Mobile disabled
LOGIN_ERROR_SYSTEM_DOWN	
LOGIN_ERROR_UNKNOWN_ERROR	Login invalid
LOGIN_ERROR_USER_API_ONLY	Failed: API-only user
LOGIN_ERROR_USER_FROZEN	User is frozen
LOGIN_ERROR_USER_INACTIVE	User is inactive
LOGIN_ERROR_USER_NON_MOBILE	Failed: Mobile license required
LOGIN_ERROR_USER_STORE_ACCESS	
LOGIN_ERROR_USERNAME_EMPTY	
LOGIN_ERROR_WIRELESS_DISABLED	Wireless disabled
LOGIN_ERROR_WIRELESS_TRIAL_EXP	Wireless trial expired
LOGIN_LIGHTNING_LOGIN	Lightning Login required
LOGIN_NO_ERROR	
LOGIN_OAUTH_API_DISABLED	Failed: OAuth API access disabled
LOGIN_OAUTH_CONSUMER_DELETED	Failed: Consumer Deleted
LOGIN_OAUTH_DS_NOT_EXPECTED	Failed: Activation secret not expected
LOGIN_OAUTH_EXCEED_GET_AT_LMT	Failed: Get Access Token Limit Exceeded
LOGIN_OAUTH_INVALID_CODE_CHALLENGE	Failed: Invalid Code Challenge
LOGIN_OAUTH_INVALID_CODE_VERIFIER	Failed: Invalid Code Verifier
LOGIN_OAUTH_INVALID_DEVICE	Failed: Device Id missing or not registered
LOGIN_OAUTH_INVALID_DS	Failed: Activation secret invalid

API Error Code	Details (If Available)
LOGIN_OAUTH_INVALID_DSIG	Failed: Signature Invalid
LOGIN_OAUTH_INVALID_IP	Failed: IP Address Not Allowed
LOGIN_OAUTH_INVALID_NONCE	Failed: Invalid Nonce
LOGIN_OAUTH_INVALID_SIG_METHOD	Failed: Invalid Signature Method
LOGIN_OAUTH_INVALID_TIMESTAMP	Failed: Invalid Timestamp
LOGIN_OAUTH_INVALID_TOKEN	Failed: Invalid Token
LOGIN_OAUTH_INVALID_VERIFIER	Failed: Invalid Verifier
LOGIN_OAUTH_INVALID_VERSION	Failed: Version Not Supported
LOGIN_OAUTH_MISSING_DS	Activation secret missing
LOGIN_OAUTH_NO_CALLBACK_URL	Failed: Invalid Callback URL
LOGIN_OAUTH_NO_CONSUMER	Missing Consumer Key Parameter
LOGIN_OAUTH_NO_TOKEN	Missing OAuth Token Parameter
LOGIN_OAUTH_NONCE_REPLAY	Failed: Nonce Replay Detected
LOGIN_OAUTH_PACKAGE_MISSING	Package for this consumer is not installed in your organization
LOGIN_OAUTH_PACKAGE_OLD	Installed package for this consumer is out of date
LOGIN_OAUTH_UNEXPECTED_PARAM	Failed: Unexpected parameter
LOGIN_ORG_TRIAL_EXP	Trial Expired
LOGIN_READONLY_CANNOT_VALIDATE	
LOGIN_SAML_INVALID_AUDIENCE	Failed: Audience Invalid
LOGIN_SAML_INVALID_CONFIG	Failed: Configuration Error/Perm Disabled
LOGIN_SAML_INVALID_FORMAT	Failed: Assertion Invalid
LOGIN_SAML_INVALID_IN_RES_TO	Failed: InResponseTo Invalid
LOGIN_SAML_INVALID_ISSUER	Failed: Issuer Mismatched
LOGIN_SAML_INVALID_ORG_ID	Failed: Invalid Organization Id
LOGIN_SAML_INVALID_PORTAL_ID	Failed: Invalid Portal Id
LOGIN_SAML_INVALID_RECIPIENT	Failed: Recipient Mismatched
LOGIN_SAML_INVALID_SESSION_LEVEL	
LOGIN_SAML_INVALID_SIGNATURE	Failed: Signature Invalid
LOGIN_SAML_INVALID_SITE_URL	Failed: Invalid Site URL
LOGIN_SAML_INVALID_STATUS	Failed: Status Invalid

API Error Code	Details (If Available)
LOGIN_SAML_INVALID_SUB_CONFIRM	Failed: Subject Confirmation Error
LOGIN_SAML_INVALID_TIMESTAMP	Failed: Assertion Expired
LOGIN_SAML_INVALID_USERNAME	Failed: Username Or SSO Id Invalid
LOGIN_SAML_INVALID_VERSION	
LOGIN_SAML_MISMATCH_CERT	Failed: Signature Invalid/Configured Certificate Mismatch
LOGIN_SAML_MISSING_ORG_ID	Failed: Missing Organization Id for Portal login
LOGIN_SAML_MISSING_PORTAL_ID	Failed: Missing Portal Id
LOGIN_SAML_PROVISION_ERROR	Failed: SAML Provision Error
LOGIN_SAML_REPLAY_ATTEMPTED	Failed: Replay Detected
LOGIN_SAML_SITE_INACTIVE	Failed: Specified Site is Inactive
LOGIN_TWOFACTOR_REQ	Multi-factor (formerly called two-factor) is required

Usage

Use LOGIN_STATUS to determine whether your users' login attempts were successful. For example, you can determine whether a departed employee attempted to log in successfully or unsuccessfully.



A	B	C	D	E	F	G	H	I	J	K
EVENT_TYPE	CLIENT_IP	URI	SESSION_KEY	LOGIN_KEY	REQUEST_STATUS	USER_NAME	TIMESTAMP_DERIVED	USER_ID_DERIVED	URI_ID_DERIVED	LOGIN_STATUS
Login	1.2.3.4	/my/uri/path/005B0000000GSwO	sidHash_basic	loginHash_basic	requestStatus_common	userName_L	2015-01-01T00:00:00.000	001xx0000000useAAA	005B0000000GSwOIAW	LOGIN_NO_ERROR

SEE ALSO:

- Login Event Type
- EventLogFile Supported Event Types
- EventLogFile

Login As Event Type

Login As events contain details about what a Salesforce admin did while logged in as another user.

Note: Login Event Type is used by EventLogFile (ELF). It is not a real-time event. For the LoginEvent real-time event, which is part of Real-Time Event Monitoring (RTEM), see LoginEvent in the *Platform Events Developer Guide*.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details

`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: `96.43.144.26`.
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.
`DELEGATED_USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or API. In this case, the user who's doing the impersonation.
`DELEGATED_USER_ID_DERIVED`	**Type** Id **Description** The 18-character case-insensitive ID of the user who's using Salesforce services through the UI or API. In this case, the user who's doing the impersonation.
`DELEGATED_USER_NAME`	**Type** String **Description** The username of the user who's using Salesforce services through the UI or API. In this case, the user who's doing the impersonation.
`EVENT_TYPE`	**Type** String **Description** The type of event. The value is always `LoginAs`.
`LOGIN_KEY`	**Type** String

Field	Details
	Description The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: `GeJCsym5eyvtEK2I`.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. For example: `3nWgxWbDKWWDIk0FKfF5DV`.
`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For example: `d7DEq/ANa7nNZZVD`.
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
`TIMESTAMP_DERIVED`	**Type** DateTime

	Description The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`URI`	**Type** String **Description** The URI of the page that's receiving the request. For example: `/home/home.jsp`.
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: `00590000000I1SNIA0`.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Logout Event Type

Logout events contain details of user logouts.

Note: Login Event Type is used by EventLogFile (ELF). It is not a real-time event. For the LoginEvent real-time event, which is part of Real-Time Event Monitoring (RTEM), see LoginEvent in the *Platform Events Developer Guide*.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
API_TYPE	**Type** String **Description** The type of API request. Possible values are: • D—Apex Class • E—SOAP Enterprise • I—SOAP Cross Instance • M—SOAP Metadata • O—Old SOAP • P—SOAP Partner • S—SOAP Apex • T—SOAP Tooling • X—XmlRPC • f—Feed • l—Live Agent • p—SOAP ClientSync
API_VERSION	**Type** String **Description** The version of the API that's being used. For example: 36.0.
APP_TYPE	**Type** Number **Description** The application type that was in use upon logging out. **Example Values** • 1007: SFDC Application • 1014: Chat • 2501: CTI • 2514: OAuth • 3475: SFDC Partner Portal
BROWSER_TYPE	**Type** String

Field	Details
	Description The identifier string returned by the browser used at login. Example values are: • `Go-http-client/1.1` • `Mozilla/5.0 (Macintosh; Intel Mac OS X 10.12; rv%3A50.0) Gecko/20100101 Firefox/50.0` • `Mozilla/5.0 (Macintosh; Intel Mac OS X 10_11_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/51.0.2704.84 Safari/537.36`
CLIENT_IP	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: `96.43.144.26`.
CLIENT_VERSION	**Type** Number **Description** The version of the client that was in use upon logging out.
EVENT_TYPE	**Type** String **Description** The type of event. The value is always `Logout`.
LOGIN_KEY	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: `GeJCsym5eyvtEK2I`.
ORGANIZATION_ID	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`.

	Example
`PLATFORM_TYPE`	**Type** Number **Description** The code for the client platform. If a timeout caused the logout, this field is null. **Example Values** • `1000`: Windows • `2003`: Macintosh/Apple OSX • `5005`: Android • `5006`: iPhone • `5007`: iPad
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. For example: `3nWgxWbDKWWDIk0FKfF5DV`.
`RESOLUTION_TYPE`	**Type** Number **Description** The screen resolution of the client. If a timeout caused the logout, this field is null.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For example: `d7DEq/ANa7nNZZVD`.
`SESSION_LEVEL`	**Type** String **Description** The security level of the session that was used when logging out.

	Possible Values • `1`: Standard Session • `2`: High-Assurance Session
`SESSION_TYPE`	**Type** String **Description** The session type that was used when logging out. **Possible Values** • `A`: API • `I`: APIOnlyUser • `N`: ChatterNetworks • `Z`: ChatterNetworksAPIOnly • `C`: Content • `P`: OauthApprovalUI • `O`: Oauth2 • `T`: SiteStudio • `R`: SitePreview • `S`: SubstituteUser • `B`: TempContentExchange • `G`: TempOauthAccessTokenFrontdoor • `Y`: TempVisualforceExchange • `F`: TempUIFrontdoor • `U`: UI • `E`: UserSite • `V`: Visualforce • `W`: WDC_API
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`).

	For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: `0059000000I1SNIA0`.
`USER_INITIATED_LOGOUT`	**Type** Boolean **Description** The value is 1 if the user intentionally logged out of the organization by clicking the **Logout** button. If the user's session timed out due to inactivity or another implicit logout action, the value is 0.
`USER_TYPE`	**Type** String **Description** The category of user license of the user that logged out. **Possible Values** • `A`: Automated Process • `b`: High Volume Portal • `C`: Customer Portal User • `D`: External Who • `F`: Self-Service • `G`: Guest • `L`: Package License Manager • `N`: Salesforce to Salesforce • `n`: CSN Only • `O`: Power Custom • `o`: Custom • `P`: Partner

	- p: Customer Portal Manager - S: Standard - X: Salesforce Administrator

SEE ALSO:

EventLogFile Supported Event Types
EventLogFile

Metadata API Operation Event Type

Metadata API Operation events contain details of Metadata API retrieval and deployment requests.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
API_VERSION	**Type** String **Description** The version of the API that's being used. For example: 36.0.
CLIENT_ID	**Type** String **Description** The API client ID.
CLIENT_IP	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: 96.43.144.26.
CPU_TIME	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.

`EVENT_TYPE`	**Type** String **Description** The type of event. The value is always `MetadataApiOperation`.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: `GeJCsym5eyvtEK2I`.
`OPERATION`	**Type** String **Description** The operation that's being performed. **Possible Values** • `meta_deploy` • `meta_list` • `meta_retrieve` • `meta_synchronous_create` • `meta_synchronous_read` • `meta_synchronous_upsert`
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. For example: `3nWgxWbDKWWDIk0FKfF5DV`.

`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For example: `d7DEq/ANa7nNZZVD`.
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`URI`	**Type** String **Description** The URI of the page that's receiving the request. For example: `/home/home.jsp`.
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id

	Description The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: `00590000000I1SNIA0`.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Multiblock Report Event Type

Multiblock Report events contain details about Joined Report reports.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: `96.43.144.26`.
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.
`DB_TOTAL_TIME`	**Type** Number

Field	Details
	Description The time in nanoseconds for a database round trip. Includes time spent in the JDBC driver, network to the database, and `DB_CPU_TIME`. Compare this field to `CPU_TIME` to determine whether performance issues are occurring in the database layer or in your own code.
`EVENT_TYPE`	**Type** String **Description** The type of event. The value is always `MultiblockReport`.
`HAS_CHART`	**Type** Boolean **Description** True if the report has a chart.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: `GeJCsym5eyvtEK2I`.
`MASTER_REPORT_ID`	**Type** String **Description** The 15-character ID of the master report.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`.

	For example: `3nWgxWbDKWWDIk0FKfF5DV`.
`REQUEST_STATUS`	**Type** String **Description** The status of the request for a page view or user interface action. Possible values are: • `S`—Success. Salesforce handled the request successfully. If an Apex controller throws an exception, this status is also returned. • `F`—Failure. Typically 4xx or 5xx HTTP codes, such as no permission to view page, page took too long to render, page is read-only. • `U`—Undefined • `A`—Authorization Error • `R`—Redirect. Typically a 3xx HTTP code, possibly initiated by an Apex controller in a Visualforce page. • `N`—Not Found. 404 error. **Possible Values**
`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For example: `d7DEq/ANa7nNZZVD`.
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
`TIMESTAMP_DERIVED`	**Type** DateTime

	Description The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`URI`	**Type** String **Description** The URI of the page that's receiving the request. For example: `/home/home.jsp`.
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: `00590000000I1SNIA0`.

SEE ALSO:

EventLogFile Supported Event Types
EventLogFile

One Commerce Usage Event Type

One Commerce Usage events capture information about your Commerce instance. This event type is available in the EventLogFile object in API version 51.0 and later.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
BROWSER_DEVICE_TYPE	**Type** Number **Description** A code used to identify the browser and device type. The code is in the format "BBVVVXYZ," with the following signification: • BB — Two digits that indicate the browser type. – IE: "10" – CHROME: "13" – FIREFOX: "11" – SAFARI: "14" – OPERA: "15" – ANDROID_WEBKIT: "16" – NETSCAPE: "17" – OTHER_WEBKIT: "18" – OTHER_GECKO: "19" – OTHER_KHTML: "20" – OTHER_MOBILE: "21" – SALESFORCE_DESKTOP: "22" – BLACKBERRY: "23" – GOOD_ACCESS: "24" – EDGE: "25" – SALESFORCE_MOBILE: "26" • VVV—Three digits that indicate version, leading zeroes. • XYZ—Browser-type specific flags or options. Each digit in XYZ represents a different flag depending on the BrowserType: – X=1: If the parser recognizes a "touch" browser. Here, touch means the older touch native client, not that the device supports touch. – Y=1: If the parser recognizes a browser in compatibility mode. Only for IE. – Z=1: If the browser is recognized as `MOBILE`. – Z=2: If the browser is recognized as `PHONE`. – Z=3: If the browser is recognized as `TABLET`. – Z=4: If the browser is a recognized as `MEDIA PLAYER`.

Field	Details
	– Z=6: Only for Opera Mini.
B2B_EDITION	**Type** String **Description** Edition of B2B Commerce. Edition can include Lightning (LB2B), CCRZ, or future flavors.
B2B_VERSION	**Type** String **Description** This field is optional. For the managed package, then B2B_VERSION includes Major, Minor, Patch revision numbers. For Lightning B2B_VERSION includes the optional service version.
CONTEXT_ID	**Type** String **Description** The contextId (Key Business Domain Value) in which the operation is done. For example, for Cart, the contextId is cartId.
CONTEXT_MAP	**Type** String **Description** This field is optional. It holds a JSON string with additional operational context.
CORRELATION_ID	**Type** String **Description** This field holds correlations, such as client to server and other asynchronous calls to B2B subsystems.
COUNT	**Type** String **Description** The number of records impacted by this operation.
EFFECTIVE_ACCOUNT_ID	**Type** String

Field	Details
	Description The B2B Effective Account ID in context of the operation.
ERROR_CODE	**Type** String **Description** The API error code that appears when an operation fails. If there is no error the value is `null`.
ERROR_MESSAGE	**Type** String **Description** Error message that appears when an operation fails. If there is no error the value is `null`.
EVENT_TYPE	**Type** String **Description** The type of event. The value is always OneCommerceUsage.
IS_RETRY	**Type** String **Description** The field is `True` if the operation resulted in a retry, otherwise it's `False`. Understanding the frequency of operation retries helps determine the health of a service. The default value is `False`.
ORGANIZATION_ID	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
OPERATION	**Type** String **Description** The name of the B2B service. For example: `CreateCart` or `KeywordSearch`.

Field	Details
OPERATION_STAGE	**Type** String **Description** This field is optional. Used to capture more granular operation level stages.
OPERATION_STATE	**Type** String **Description** This field is optional. An enum for the state of the operation. For example: `CartLocked`, `OrderCancelled`, `InProgress`, `New`, `Update`, and `Pending`.
OPERATION_STATUS	**Type** String **Description** Enum with the outcome of the operation. For example: `Success` or `Fail`.
OPERATION_TIME	**Type** String **Description** Total time of the operation in milliseconds.
OS_VERSION	**Type** String **Description** Code used to identify the operating system and version. The value is equal to 9999 for an unknown platform.
SERVICE_NAME	**Type** String **Description** Enum of B2B Services. For example: `Cart`, `Pricing`, `Products`, `Order`, `Search`, and so on.
USER_ID	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API.

Field	Details
	For example: `00530000009M943`
WEBSTORE_ID	**Type** String **Description** This field is optional. The ID of the webstore associated with the store (site).
WEBSTORE_TYPE	**Type** String **Description** The type of webstore. For example: `B2B`, `B2C`, and `OMS`.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Package Install Event Type

Package Install events contain details about package installation in the organization.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
CLIENT_IP	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: `96.43.144.26`.
CPU_TIME	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.

EVENT_TYPE	**Type** String **Description** The type of event. The value is always PackageInstall.
FAILURE_TYPE	**Type** String **Description** A general categorization of any error that's encountered.
IS_MANAGED	**Type** Boolean **Description** True if the operation is performed on a managed package.
IS_PUSH	**Type** Boolean **Description** True if the package was installed as a result of a push upgrade.
IS_RELEASED	**Type** Boolean **Description** True if the operation is performed on a released package.
IS_SUCCESSFUL	**Type** Boolean **Description** True if the package was successfully installed.
LOGIN_KEY	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: GeJCsym5eyvtEK2I.
OPERATION_TYPE	**Type** String **Description** The type of package operation.

	Possible Values • INSTALL • UPGRADE • EXPORT • UNINSTALL • VALIDATE_PACKAGE • INIT_EXPORT_PKG_CONTROLLER
ORGANIZATION_ID	**Type** Id **Description** The 15-character ID of the organization. For example: 00D000000000123. **Example**
PACKAGE_NAME	**Type** String **Description** The name of the package that's being installed.
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. For example: 3nWgxWbDKWWDIk0FKfF5DV.
RUN_TIME	**Type** Number **Description** The amount of time that the request took in milliseconds.
SESSION_KEY	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For example: d7DEq/ANa7nNZZVD.

TIMESTAMP	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
TIMESTAMP_DERIVED	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
URI	**Type** String **Description** The URI of the page that's receiving the request. For example: `/home/home.jsp`.
URI_ID_DERIVED	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
USER_ID	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
USER_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API.

	For example: `00590000000I1SNIA0`.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Platform Encryption Event Type

Platform Encryption event contains information about tenant secret and derived encryption key usage. This event type is available in API versions 41.0 and later.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`ACTION`	**Type** String **Description** The name and type of the event. **Possible Values** • TS Imported: A tenant secret generated by the Shield Key Management Service (KMS), or customer-supplied key material, imported by a customer. • TS Generated: A tenant secret generated by the Shield Key Management Service (KMS). • Key Derived: An encryption key derived from a tenant secret for encryption or decryption. • TS Wrapped: A tenant secret generated by the Shield Key Management Service (KMS), or customer-supplied key material, encrypted for storage. • Key Delivered: A data encryption key delivered for encryption or decryption. • TS Stored: A tenant secret generated by the Shield Key Management Service (KMS), or customer-supplied key material, stored encrypted in the database. • TS Read: An encrypted tenant secret generated by the Shield Key Management Service (KMS), or encrypted customer-supplied key material, that is loaded for encryption or decryption. • TS Unwrapped: An encrypted tenant secret generated by the Shield Key Management Service (KMS), or encrypted

customer-supplied key material, unwrapped for use by the KMS.

- TS Exported: An encrypted tenant secret exported by a customer.
- TS Destroyed: A tenant secret and related data encryption key destroyed by a customer.

`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: `96.43.144.26`.
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.
`EVENT_TYPE`	**Type** String **Description** The type of event. The value is always `PlatformEncryption`.
`KEY_ID`	**Type** String **Description** The 15-character ID of the tenant secret. **Example** 02GD000000096Cb
`KEY_ID_DERIVED`	**Type** String **Description** The 18-character ID of the derived encryption key. **Example** 02GD000000096CbMAI
`KEY_TYPE`	**Type** String

	Description The type of tenant secret. **Possible Values** • Data • DeterministicData • EinsteinAnalytics • SearchIndex
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: `GeJCsym5eyvtEK2I`.
`METHOD`	**Type** String **Description** The string that identifies a change in tenant secret Active state. For example, tenant secrets become active when they are created, and are made inactive when they are exported. **Examples** • TS Exported: User ID • TS Generated: HSM or BYOK • TS Unwrapped: Tenant Secret or BYOK
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. For example: `3nWgxWbDKWWDIk0FKfF5DV`.

`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For example: `d7DEq/ANa7nNZZVD`.
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`URI`	**Type** String **Description** The URI of the page that's receiving the request. For example: `/home/home.jsp`.
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id

	Description The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: `00590000000I1SNIA0`.
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: `00590000000I1SNIA0`.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Queued Execution Event Type

Queued Execution events contain details about queued executions—for example, batch Apex.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: `96.43.144.26`.
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds that it took to complete the batch apex request. This field indicates the amount of activity taking place in the app server layer, allowing you to identify pieces of Apex or Visualforce code that need refactoring.
`DB_TOTAL_TIME`	**Type** Number

Field	Details
	Description The time in nanoseconds for a database round trip. Includes time spent in the JDBC driver, network to the database, and `DB_CPU_TIME`. Compare this field to `CPU_TIME` to determine whether performance issues are occurring in the database layer or in your own code.
`ENTRY_POINT`	**Type** String **Description** The name of the Apex class that serves as the execution point for the batch job. **Example** TaskPhoneExtensionBatchUpdate
`EVENT_TYPE`	**Type** String **Description** The type of event. The value is always `QueuedExecution`.
`JOB_ID`	**Type** String **Description** The ID of the batch Apex job. **Example** 7073000000lDquo
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: `GeJCsym5eyvtEK2I`.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**

Field	Details
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. For example: 3nWgxWbDKWWDIk0FKfF5DV.
REQUEST_STATUS	**Type** String **Description** The status of the request for a page view or user interface action. Possible values are: • S—Success. Salesforce handled the request successfully. If an Apex controller throws an exception, this status is also returned. • F—Failure. Typically 4xx or 5xx HTTP codes, such as no permission to view page, page took too long to render, page is read-only. • U—Undefined • A—Authorization Error • R—Redirect. Typically a 3xx HTTP code, possibly initiated by an Apex controller in a Visualforce page. • N—Not Found. 404 error. **Possible Values**
RUN_TIME	**Type** Number **Description** The amount of time that the request took in milliseconds.
SESSION_KEY	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For example: d7DEq/ANa7nNZZVD.

Field	Details
TIMESTAMP	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
TIMESTAMP_DERIVED	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
URI	**Type** String **Description** The URI of the page that's receiving the request. For example: `/home/home.jsp`.
URI_ID_DERIVED	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
USER_ID	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
USER_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API.

Field	Details
	For example: 00590000000I1SNIA0.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Report Event Type

Report events contain information about what happened when a user ran a report. This event type includes all activity that's in the Report Export event type, plus more. For example, it has user activity for reports exported as both Formatted Report and Details Only output.

Note: Exporting a report directly from the report result captures the event in both the Report and Report Export logs.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
AVERAGE_ROW_SIZE	**Type** Number **Description** The average row size of all rows in the Report event, in bytes. A large average size, coupled with a high ROW_COUNT, can indicate that a user is downloading information for fraudulent purposes. For example, a salesperson who downloads all sales leads before departing for a competitor. **Example** 700
CLIENT_IP	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: 96.43.144.26.
CPU_TIME	**Type** Number

	Description The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.
DB_BLOCKS	**Type** Number **Description** Indicates how much activity is occurring in the database. A high value for this field suggests that adding indexes or filters on your queries would benefit performance.
DB_CPU_TIME	**Type** Number **Description** The CPU time in milliseconds to complete the request. Indicates the amount of activity taking place in the database layer during the request.
DB_TOTAL_TIME	**Type** Number **Description** The time in nanoseconds for a database round trip. Includes time spent in the JDBC driver, network to the database, and DB_CPU_TIME. Compare this field to CPU_TIME to determine whether performance issues are occurring in the database layer or in your own code.
DISPLAY_TYPE	**Type** String **Description** The report display type, indicating the run mode of the report. Possible values are: • D—Dashboard • S—Show Details • H—Hide Details
ENTITY_NAME	**Type** String **Description** The name of the object affected by the trigger.
EVENT_TYPE	**Type** String

Field	Details
	Description The type of event. The value is always `Report`.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: `GeJCsym5eyvtEK2I`.
`NUMBER_BUCKETS`	**Type** Number **Description** The number of buckets that were used in the report.
`NUMBER_COLUMNS`	**Type** Number **Description** The number of columns in the report.
`NUMBER_EXCEPTION_FILTERS`	**Type** Number **Description** The number of exception filters that are used in the report.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
`ORIGIN`	**Type** String **Description** The context in which the report executed, such as from a UI (Classic, Lightning, Mobile), through an API (synchronous, asynchronous, Apex), or through a dashboard. **Possible Values** • `ReportOpenedFromMobileDashboard`: Report executed when a user clicked a dashboard component on a mobile device and drilled down to a report.

- `DashboardComponentUpdated`: Report executed when a user refreshed a dashboard component.
- `DashboardComponentPreviewed`: Report executed from a Lightning dashboard component preview.
- `ReportRunUsingSynchronousApi`: Report executed from a synchronous API.
- `ReportRunUsingAsynchronousApi`: Report executed from an asynchronous API.
- `ReportRunUsingApexSynchronousApi`: Report executed from the synchronous Apex API.
- `ReportRunUsingApexAsynchronousApi`: Report executed from the asynchronous Apex API.
- `ReportExported`: Report executed from a printable view or report export that was not asynchronous nor an API export.
- `ReportRunFromClassic`: Report executed from the Run Report option of Salesforce Classic.
- `ReportRunFromMobile`: Report executed from the Run Report option of the mobile Salesforce app.
- `ReportRunFromLightning`: Report executed from the Run option in Lightning Experience from a non-mobile browser.
- `ReportRunFromRestApi`: Report executed from REST API.
- `ReportPreviewed`: Report executed when a user got preview results while using the report builder.
- `ReportScheduled`: Report was scheduled.
- `ProbeQuery`: Report executed from a probe query.
- `ReportRunFromReportingSnapshot`: Report executed through Snapshot Analytics.
- `ReportExportedAsynchronously`: Report was exported asynchronously.
- `ReportExportedUsingExcelConnector`: Report was exported using the Excel connector.
- `ChartRenderedOnVisualforcePage`: Report executed from a rendered chart on a VisualForce Page.
- `ChartRenderedInEmbeddedAnalyticsApp`: Report executed from a rendered chart in an embedded Analytics app.
- `ReportRunAndNotificationSent`: Report executed through the notifications API.
- `ChartRenderedOnHomePage`: Report executed from a rendered chart on the home page.

- `ReportResultsAddedToWaveTrending`: Report executed when a user trended a report in Einstein Analytics.
- `ReportAddedToCampaign`: Report was added from an Add to Campaign action.
- `ReportResultsAddedToEinsteinDiscovery`: Report executed synchronously from Einstein Discovery.
- `Unknown`: Report execution origin is unknown.
- `Test`: Report execution resulted from a test.

`RENDERING_TYPE`	**Type** String **Description** Describes the format of the report output in Salesforce Classic. If the report was exported in Lightning Experience, this field is blank. **Possible Values** • `W`: Web (HTML) • `E`: Email • `P`: Printable • `X`: Excel • `C`: Comma-separated values (CSV) • `J`: JavaScript Object Notation (JSON) • `D`: Dummy data
`REPORT_ID`	**Type** Id **Description** The 15-character ID of the report that was run.
`REPORT_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the report that was run.
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. For example: `3nWgxWbDKWWDIk0FKfF5DV`.

REQUEST_STATUS	**Type** String **Description** The status of the request for a page view or user interface action. Possible values are: • S—Success. Salesforce handled the request successfully. If an Apex controller throws an exception, this status is also returned. • F—Failure. Typically 4xx or 5xx HTTP codes, such as no permission to view page, page took too long to render, page is read-only. • U—Undefined • A—Authorization Error • R—Redirect. Typically a 3xx HTTP code, possibly initiated by an Apex controller in a Visualforce page. • N—Not Found. 404 error. **Possible Values**
ROW_COUNT	**Type** Number **Description** The number of rows that were processed in the Report event. High row counts, coupled with a high AVERAGE_ROW_SIZE, can indicate that a user is downloading information for fraudulent purposes. For example, a salesperson who downloads all sales leads before departing for a competitor. **Example** 150
RUN_TIME	**Type** Number **Description** The amount of time that the request took in milliseconds.
SESSION_KEY	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For example: d7DEq/ANa7nNZZVD.

SORT	**Type** String **Description** The sort column and order that was used in the report.
TIMESTAMP	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
TIMESTAMP_DERIVED	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
URI	**Type** String **Description** The URI of the page that's receiving the request. For example: `/home/home.jsp`.
URI_ID_DERIVED	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
USER_ID	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
USER_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API.

For example: `00590000000I1SNIA0`.

Usage

Example: Identify Large Report Exports by User

Get Report event type data from the EventLogFile object using REST:

```
/services/data/v40.0/query?q=SELECT+Id+,+EventType+,+LogFile+,+LogDate+,+LogFileLength+FROM+EventLogFile+WHERE+

    LogDate+>+Yesterday+AND+EventType+=+'Report'
```

After you download the report data to a ReportData database table, query it and filter on reports that were exported with high row counts and size:

```
SELECT USER_ID FROM ReportData WHERE (RENDERING_TYPE=C OR RENDERING_TYPE=X OR
RENDERING_TYPE=P) AND ROW_COUNT>150000 AND AVERAGE_ROW_SIZE>1500
```

SEE ALSO:

EventLogFile Supported Event Types
EventLogFile

Report Export Event Type

Report Export events contain details about reports that a user exported. For example, this event type captures when a user exports a report as Details Only output. But it doesn't capture reports that users export as Formatted Report output. For that data, see the Report event type.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: `96.43.144.26`.
`CLIENT_INFO`	**Type** String **Description** Information about the client that's using Salesforce services.

`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.
`EVENT_TYPE`	**Type** String **Description** The type of event. The value is always `ReportExport`.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: `GeJCsym5eyvtEK2I`.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
`REPORT_DESCRIPTION`	**Type** String **Description** Information about the report that was run.
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. For example: `3nWgxWbDKWWDIk0FKfF5DV`.
`RUN_TIME`	**Type** Number

	Description The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For example: `d7DEq/ANa7nNZZVD`.
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`URI`	**Type** String **Description** The URI of the page that's receiving the request. For example: `/home/home.jsp`.
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`

Field	Details
USER_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: 00590000000I1SNIA0.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

REST API Event Type

REST API events contain details about REST-specific requests.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
CLIENT_IP	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: 96.43.144.26.
CPU_TIME	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.
DB_BLOCKS	**Type** Number **Description** Indicates how much activity is occurring in the database. A high value for this field suggests that adding indexes or filters on your queries would benefit performance.

Field	Details
DB_CPU_TIME	**Type** Number **Description** The CPU time in milliseconds to complete the request. Indicates the amount of activity taking place in the database layer during the request.
DB_TOTAL_TIME	**Type** Number **Description** The time in nanoseconds for a database round trip. Includes time spent in the JDBC driver, network to the database, and `DB_CPU_TIME`. Compare this field to `CPU_TIME` to determine whether performance issues are occurring in the database layer or in your own code.
ENTITY_NAME	**Type** Set **Description** API objects that are accessed. For example: `Account`, `Opportunity`, `Contact`, and so on.
EVENT_TYPE	**Type** String **Description** The type of event. The value is always `RestApi`.
LOGIN_KEY	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: `GeJCsym5eyvtEK2I`.
MEDIA_TYPE	**Type** String **Description** The media type of the response.
METHOD	**Type** String

	Description The HTTP method of the request. For example: `GET`, `POST`, `PUT`, and so on.
`NUMBER_FIELDS`	**Type** Number **Description** The number of fields or columns, where applicable.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
`REQUEST_SIZE`	**Type** Number **Description** The size of the callout request body, in bytes.
`REQUEST_STATUS`	**Type** String **Description** The status of the request for a page view or user interface action. Possible values are: • `S`—Success. Salesforce handled the request successfully. If an Apex controller throws an exception, this status is also returned. • `F`—Failure. Typically 4xx or 5xx HTTP codes, such as no permission to view page, page took too long to render, page is read-only. • `U`—Undefined • `A`—Authorization Error • `R`—Redirect. Typically a 3xx HTTP code, possibly initiated by an Apex controller in a Visualforce page. • `N`—Not Found. 404 error. **Possible Values**
`REQUEST_ID`	**Type** String

Field	Details
	Description The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. For example: `3nWgxWbDKWWDIk0FKfF5DV`.
`RESPONSE_SIZE`	**Type** Number **Description** The size of the callout response, in bytes.
`ROWS_PROCESSED`	**Type** Number **Description** The number of rows that were processed in the request. For example: `150`.
`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For example: `d7DEq/ANa7nNZZVD`.
`STATUS_CODE`	**Type** Number **Description** The HTTP status code for the response.
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
`TIMESTAMP_DERIVED`	**Type** DateTime

	Description The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`URI`	**Type** String **Description** The URI of the page that's receiving the request. For example: `/home/home.jsp`.
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_AGENT`	**Type** Number **Description** The numeric code for the type of client used to make the request (for example, the browser, application, or API).
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: `00590000000I1SNIA0`.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Sandbox Event Type

Sandbox events contain details about sandbox copies.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
CURRENT_SANDBOX_ORG_ID	**Type** Id **Description** The 15-character ID of the current sandbox organization.
EVENT_TYPE	**Type** String **Description** The type of event. The value is always `Sandbox`.
ORGANIZATION_ID	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
PENDING_SANDBOX_ORG_ID	**Type** Id **Description** The 15-character ID of the target sandbox org.
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. For example: `3nWgxWbDKWWDIk0FKfF5DV`.
SANDBOX_ID	**Type** Id **Description** The 15-character ID of the sandbox organization.

STATUS	**Type** String **Description** The status of the sandbox copy.
TIMESTAMP	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
TIMESTAMP_DERIVED	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
USER_ID	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
USER_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: `00590000000I1SNIA0`.

SEE ALSO:

EventLogFile Supported Event Types
EventLogFile

Search Event Type

Search events contain details about the user's search query. All searches within the app, including Experience Cloud sites, are included. However, unauthenticated users won't have a unique Salesforce user ID.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`EVENT_TYPE`	**Type** String **Description** The type of event. The value is always `Search`.
`NUM_RESULTS`	**Type** Number **Description** Number of results returned by the search query. **Possible Values** • 0 • 25 • 1000
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
`PREFIXES_SEARCHED`	**Type** String **Description** Space-separated list of key prefixes that were searched. **Example** 001 006 ka0
`QUERY_ID`	**Type** String **Description** Unique ID of the search query. **Example** -2vx8relit08r
`REQUEST_ID`	**Type** String

	Description The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. For example: 3nWgxWbDKWWDIk0FKfF5DV.
SEARCH_QUERY	**Type** String **Description** The first 100 characters of the search query. **Example** Salesforce
TIMESTAMP	**Type** String **Description** The access time of Salesforce services in GMT. For example: 20130715233322.670.
TIMESTAMP_DERIVED	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (YYYY-MM-DDTHH:MM:SS.sssZ). For example: 2015-07-27T11:32:59.555Z. Timezone is GMT.
USER_ID	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: 00590000000I1SNIA0.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Search Click Event Type

Search Click events contain details about the user's interaction with the search results. All searches within the app, including Experience Cloud sites, are included. However, unauthenticated users won't have a unique Salesforce user ID.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`CLICKED_RECORD_ID`	**Type** String **Description** The 15-character ID of the result the user clicked in the search results page. **Example** a07B00000031pRV
`EVENT_TYPE`	**Type** String **Description** The type of event. The value is always `SearchClick`.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
`QUERY_ID`	**Type** String **Description** Unique ID of the search query. **Example** -2vx8relit08r
`RANK`	**Type** Number **Description** Ranking of the result clicked in the search results page. **Example** 2
`REQUEST_ID`	**Type** String

	Description The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. For example: 3nWgxWbDKWWDIk0FKfF5DV.
TIMESTAMP	**Type** String **Description** The access time of Salesforce services in GMT. For example: 20130715233322.670.
TIMESTAMP_DERIVED	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (YYYY-MM-DDTHH:MM:SS.sssZ). For example: 2015-07-27T11:32:59.555Z. Timezone is GMT.
USER_ID	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: 00590000000I1SNIA0.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Sites Event Type

Sites events contain details of Site.com requests. Requests can originate from the browser (UI).

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
CLIENT_IP	**Type** String

	Description The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: `96.43.144.26`.
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.
`DB_TOTAL_TIME`	**Type** Number **Description** The time in nanoseconds for a database round trip. Includes time spent in the JDBC driver, network to the database, and `DB_CPU_TIME`. Compare this field to `CPU_TIME` to determine whether performance issues are occurring in the database layer or in your own code.
`EVENT_TYPE`	**Type** String **Description** The type of event. The value is always `Sites`.
`HTTP_HEADERS`	**Type** String **Description** The HTTP headers that were sent in the request.
`HTTP_METHOD`	**Type** String **Description** The HTTP method of the request. For example: `GET`, `POST`, `PUT`, and so on.
`IS_API`	**Type** Boolean **Description** True if this page was an API or Web Services request.

`IS_ERROR`	**Type** Boolean **Description** True if this page was an error page.
`IS_FIRST_REQUEST`	**Type** Boolean **Description** 1 if this page is the first Visualforce transaction in the request, or 0 if it isn't.
`IS_GUEST`	**Type** Boolean **Description** True if this page was a guest (unauthenticated) request.
`IS_SECURE`	**Type** Boolean **Description** True if this request is secure.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: `GeJCsym5eyvtEK2I`.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
`PAGE_NAME`	**Type** String **Description** The name of the Visualforce page that was requested.
`QUERY`	**Type** String

	Description The SOQL query, if one was performed.
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. For example: 3nWgxWbDKWWDIk0FKfF5DV.
REQUEST_STATUS	**Type** String **Description** The status of the request for a page view or user interface action. Possible values are: • S—Success. Salesforce handled the request successfully. If an Apex controller throws an exception, this status is also returned. • F—Failure. Typically 4xx or 5xx HTTP codes, such as no permission to view page, page took too long to render, page is read-only. • U—Undefined • A—Authorization Error • R—Redirect. Typically a 3xx HTTP code, possibly initiated by an Apex controller in a Visualforce page. • N—Not Found. 404 error. **Possible Values**
REQUEST_TYPE	**Type** String **Description** The request type. Possible values are: • page—a normal request for a page • content_UI—a content request for a page that originated in the user interface • content_apex—a content request initiated by an Apex call • PDF_UI—a request for a page in PDF format through the user interface

Field	Details
	• `PDF_apex`—a request for PDF format by an Apex call (usually a Web Service call)
`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For example: `d7DEq/ANa7nNZZVD`.
`SITE_ID`	**Type** Id **Description** The 15-character ID of the Site.com site.
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`URI`	**Type** String **Description** The URI of the page that's receiving the request. For example: `/home/home.jsp`.
`URI_ID_DERIVED`	**Type** ID

	Description The 18-character case insensitive ID of the URI of the page that's receiving the request.
USER_ID	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
USER_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: `00590000000I1SNIA0`.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Time-Based Workflow Event Type

Time-Based Workflow events contain details about queue activity monitoring.

For details about event monitoring, see the Trailhead Event Monitoring module or the REST API Developer's Guide.

Fields

Field	Details
CLIENT_IP	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: `96.43.144.26`.
CPU_TIME	**Type** Number

Field	Details
	Description The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.
DATA	**Type** String **Description** The record details of time queue activity.
EVENT_TYPE	**Type** String **Description** The type of event. The value is always `TimeBasedWorkflow`.
LOG_GROUP_ID	**Type** String **Description** Marks log records that are committed or rolled back.
LOGIN_KEY	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: `GeJCsym5eyvtEK2I`.
NUMBER_OF_RECORDS	**Type** Number **Description** The number of processed records.
ORGANIZATION_ID	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
REQUEST_ID	**Type** String

	Description The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. For example: `3nWgxWbDKWWDIk0FKfF5DV`.
`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For example: `d7DEq/ANa7nNZZVD`.
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`TYPE`	**Type** String **Description** The type of time-based workflow event. • `UIDEL`—An entry was deleted from the Time-Based Workflow page in Setup. • `ERRDEL`—An entry was deleted from the workflow queue, because there was an error reading the record that triggered the workflow rule. The associated time-dependent actions weren't processed.

Field	Details
	• `DELETE`—An entry was deleted from the workflow queue, because it's no longer relevant. For example, the criteria are no longer met by the associated record. If the evaluation date for the entry changed, the entry is re-added with the updated evaluation date. • `PROC`—An entry was deleted from the workflow queue after processing a time-dependent action.
`URI`	**Type** String **Description** The URI of the page that's receiving the request. For example: `/home/home.jsp`.
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: `0059000000I1SNIA0`.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Transaction Security Event Type

Transaction Security events contain details about policy execution.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
CLIENT_IP	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: `96.43.144.26`.
CPU_TIME	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.
EVALUATION_TIME_MS	**Type** Number **Description** The time in milliseconds used to evaluate the policy.
EVENT_TIMESTAMP	**Type** String **Description** The time at which the Transaction Security event was generated in ISO8601-compatible format (YYYY-MM-DDTHH:MM:SS.sssZ). This value can be earlier than TIMESTAMP_DERIVED by the amount of time taken to log the event. For example: `2015-07-27T11:32:59.555Z`.
EVENT_TYPE	**Type** String

	Description The type of event. The value is always `TransactionSecurity`.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: `GeJCsym5eyvtEK2I`.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
`POLICY_ID`	**Type** Id **Description** The 15-character ID of the policy being evaluated. For example: `00530000009M943`
`POLICY_ID_DERIVED`	**Type** Id **Description** The 18-character case-insensitive ID of the policy being evaluated. For example: `00590000000I1SNIA0`
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`.

	For example: `3nWgxWbDKWWDIk0FKfF5DV`.
`RESULT`	**Type** String **Description** The outcome of evaluating the policy. For example: `TRIGGEREDzzz` or `NOT TRIGGERED`.
`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For example: `d7DEq/ANa7nNZZVD`.
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.

`URI`	**Type** String **Description** The URI of the page that's receiving the request. For example: `/home/home.jsp`.
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: `00590000000I1SNIA0`.

SEE ALSO:

EventLogFile Supported Event Types
EventLogFile

URI Event Type

URI events contain details about user interaction with the web browser UI.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
CLIENT_IP	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: `96.43.144.26`.
CPU_TIME	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.
DB_BLOCKS	**Type** Number **Description** Indicates how much activity is occurring in the database. A high value for this field suggests that adding indexes or filters on your queries would benefit performance.
DB_CPU_TIME	**Type** Number **Description** The CPU time in milliseconds to complete the request. Indicates the amount of activity taking place in the database layer during the request.
DB_TOTAL_TIME	**Type** Number **Description** The time in nanoseconds for a database round trip. Includes time spent in the JDBC driver, network to the database, and `DB_CPU_TIME`. Compare this field to `CPU_TIME` to determine whether performance issues are occurring in the database layer or in your own code.
EVENT_TYPE	**Type** String

Field	Details
	Description The type of event. The value is always `URI`.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: `GeJCsym5eyvtEK2I`.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
`REFERRER_URI`	**Type** String **Description** The referring URI of the page that's receiving the request.
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. For example: `3nWgxWbDKWWDIk0FKfF5DV`.
`REQUEST_STATUS`	**Type** String **Description** The status of the request for a page view or user interface action. Possible values are: • `S`—Success. Salesforce handled the request successfully. If an Apex controller throws an exception, this status is also returned. • `F`—Failure. Typically 4xx or 5xx HTTP codes, such as no permission to view page, page took too long to render, page is read-only.

- U—Undefined
- A—Authorization Error
- R—Redirect. Typically a 3xx HTTP code, possibly initiated by an Apex controller in a Visualforce page.
- N—Not Found. 404 error.

Possible Values

RUN_TIME	**Type** Number **Description** The amount of time that the request took in milliseconds.
SESSION_KEY	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For example: `d7DEq/ANa7nNZZVD`.
TIMESTAMP	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
TIMESTAMP_DERIVED	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
URI	**Type** String **Description** The URI of the page that's receiving the request. For more granular URI information for Lightning Experience and the Salesforce app, see the Lightning Error, Lightning Interaction, Lightning Page View, and Lightning Performance event types.

Field	Details
	Examples `/aura` (Lightning Experience), `/lightning` (Lightning Experience and the Salesforce app), `/home/home.jsp` (Salesforce Classic)
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: `005900000001lSNIA0`.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Visualforce Request Event Type

Visualforce Request events contain details of Visualforce requests. Requests can originate from the browser (UI).

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`CLIENT_IP`	**Type** String

Field	Details
	Description The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: `96.43.144.26`.
CONTROLLER_TYPE	**Type** Number **Description** The type of controller that's used by the requested Visualforce page. **Possible Values** • `0`: NOT_SPECIFIED • `1`: STANDARD • `2`: STANDARD_SET • `3`: CUSTOM • `4`: JAVA • `5`: SPRING
CPU_TIME	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.
DB_BLOCKS	**Type** Number **Description** Indicates how much activity is occurring in the database. A high value for this field suggests that adding indexes or filters on your queries would benefit performance.
DB_CPU_TIME	**Type** Number **Description** The CPU time in milliseconds to complete the request. Indicates the amount of activity taking place in the database layer during the request.
DB_TOTAL_TIME	**Type** Number

Field	Details
	Description The time in nanoseconds for a database round trip. Includes time spent in the JDBC driver, network to the database, and `DB_CPU_TIME`. Compare this field to `CPU_TIME` to determine whether performance issues are occurring in the database layer or in your own code.
`EVENT_TYPE`	**Type** String **Description** The type of event. The value is always `VisualforceRequest`.
`HTTP_METHOD`	**Type** String **Description** The HTTP method of the request. For example: `GET`, `POST`, `PUT`, and so on.
`IS_AJAX_REQUEST`	**Type** Boolean **Description** The value is `true` if the request is a partial page request.
`IS_FIRST_REQUEST`	**Type** Boolean **Description** 1 if this page is the first Visualforce transaction in the request, or 0 if it isn't.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: `GeJCsym5eyvtEK2I`.
`MANAGED_PACKAGE_NAMESPACE`	**Type** String **Description** If the page is part of a managed package, the namespace of that package.

`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
`PAGE_NAME`	**Type** String **Description** The name of the Visualforce page that was requested.
`QUERY`	**Type** String **Description** The query string used to access the requested Visualforce page. **Example** Let's assume that the requested Visualforce page (`/apex/myAccountDetailPage?id=001xx000003GYv6AAG`) shows details of the account whose ID is in the URL. The value of `QUERY` in this case is `?id=001xx000003GYv6AAG`.
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. For example: `3nWgxWbDKWWDIk0FKfF5DV`.
`REQUEST_SIZE`	**Type** Number **Description** The size of the request body, in bytes. Value is -1 if the request body content is larger than 2GB, or if the request has no body (for example, a typical GET request).
`REQUEST_STATUS`	**Type** String **Description** The status of the request for a page view or user interface action. Possible values are:

	• `S`—Success. Salesforce handled the request successfully. If an Apex controller throws an exception, this status is also returned. • `F`—Failure. Typically 4xx or 5xx HTTP codes, such as no permission to view page, page took too long to render, page is read-only. • `U`—Undefined • `A`—Authorization Error • `R`—Redirect. Typically a 3xx HTTP code, possibly initiated by an Apex controller in a Visualforce page. • `N`—Not Found. 404 error. **Possible Values**
`REQUEST_TYPE`	**Type** String **Description** The request type. Possible values are: • `page`—a normal request for a page • `content_UI`—a content request for a page that originated in the user interface • `content_apex`—a content request initiated by an Apex call • `PDF_UI`—a request for a page in PDF format through the user interface • `PDF_apex`—a request for PDF format by an Apex call (usually a Web Service call)
`RESPONSE_SIZE`	**Type** Number **Description** The size of the response, in bytes.
`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String

Field	Details
	Description The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For example: `d7DEq/ANa7nNZZVD`.
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`URI`	**Type** String **Description** The URI of the page that's receiving the request. For example: `/home/home.jsp`.
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_AGENT`	**Type** Number **Description** The numeric code for the type of client used to make the request (for example, the browser, application, or API).
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API.

	For example: 00530000009M943
USER_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: 00590000000I1SNIA0.
VIEW_STATE_SIZE	**Type** Number **Description** The size of the Visualforce view state, in bytes.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Wave Change Event Type

Wave Change events represent route or page changes made in the Salesforce Einstein Analytics user interface. A Wave Change event type is captured every time the user opens a new Analytics asset or tab or switches between tabs. Wave Change events are logged when opening new tabs and switching back to previously opened tabs.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
ANALYTICS_MODE	**Type** String **Description** The location in which the dashboard is displayed. In the Salesforce mobile app, embedded dashboards are logged as embedded first. When a user interacts with the dashboard, a full screen dashboard is displayed to allow for user interaction, and is logged as mobileNative. Possible values are: • studio—Analytics Studio • tab—Analytics tab

	• `embedded`— Embedded in Aura or Lightning. • `mobileNative`— Analytics mobile app for iOS/Android or Salesforce mobile app for iOS/Android
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from AppExchange) is shown as "Salesforce.com IP". For example: `96.43.144.26`.
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.
`EVENT_TYPE`	**Type** String **Description** The type of event. The value is always `WaveChange`.
`IS_MOBILE`	**Type** Boolean **Description** If `true`, the dashboard is displayed in the Analytics mobile app for iOS and Android, in the Salesforce mobile app for iOS and Android, or in a mobile browser.
`IS_NEW`	**Type** Boolean **Description** The field indicates that this action opens a new tab or goes back to a previously opened tab. If the change routes to a

	new page, the value of this field is true. If it routes to an existing page, this field is false.
LOGIN_KEY	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: `GeJCsym5eyvtEK2I`.
ORGANIZATION_ID	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`.
PAGE_CONTEXT	**Type** String **Description** The context of the page in which the dashboard is displayed. In the Salesforce mobile app, embedded dashboards are logged as `aura` first. When a user interacts with the dashboard, a full screen dashboard is displayed to allow for user interaction, and is logged as `iOS` or `android`. Possible values are: • `aura`—Lightning Components • `vf`—Visualforce • `iOS`— Analytics or Salesforce mobile app for iOS • `android`— Analytics or Salesforce mobile app for Android
RECORD_ID	**Type** String **Description** The Salesforce ID of the Analytics object.

REOPEN_COUNT	**Type** Number **Description** If IS_NEW is false, the number of times that an existing page opens.
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. For example: 3nWgxWbDKWWDIk0FKfF5DV.
RUN_TIME	**Type** Number **Description** The amount of time that the request took in milliseconds.
SESSION_KEY	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For example: d7DEq/ANa7nNZZVD.
TAB_ID	**Type** String **Description** The ID of the particular Analytics tab in the user interface. For example: dashboard-0FKB0000000Ec64GDK.
TIMESTAMP	**Type** String

	Description The access time of Salesforce services in GMT. For example: `20130715233322.670`.
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`TYPE`	**Type** String **Description** The Analytics object type.
`URI`	**Type** String **Description** The URI of the page that's receiving the request. For example: `/home/home.jsp`.
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`.

USER_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: 00590000000I1SNIA0.
WAVE_SESSION_ID	**Type** String **Description** The ID of a particular session of Analytics. Use this field to determine which log lines originated from a particular session.
WAVE_TIMESTAMP	**Type** Number **Description** The time at which this log line was generated.

SEE ALSO:

EventLogFile Supported Event Types
EventLogFile

Wave Download Event Type

Wave Download events represent downloads made from lens explorations and dashboard widgets in the Salesforce Einstein Analytics user interface. A Wave Download event type is captured when a user downloads images (.png), Microsoft® Excel® data (.xls), or comma-separated values (.csv) files.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
ASSET_ID	**Type** ID **Description** The ID of the asset the user downloads from.

Field	Details
ASSET_TYPE	**Type** String **Description** The type of the asset the user downloads from. **Values** • Lens—A *lens* is a view into a dataset used in an exploratory mode or to get insight to a specific business question. The lens can be saved and shared independently. It can also be clipped to a dashboard. • Dashboard—A *dashboard* is a curated set of charts, metrics, and tables based on the data in one or more lenses.
CLIENT_IP	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
CPU_TIME	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.
DATASET_IDS	**Type** String **Description** Comma-separated list of IDs of utilized data sets.
DOWNLOAD_FORMAT	**Type** String **Description** The data format of the export. **Values** • png—Image • csv—Comma-separated values • xls— Microsoft Excel
EVENT_TYPE	**Type** String

Field	Details
	Description The type of event. The value is always `WaveChange`.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
`NUMBER_OF_RECORDS`	**Type** Number **Description** The number of records exported.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. **Example** 3nWgxWbDKWWDIk0FKfF5DV
`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started.

Field	Details
	Example d7DEq/ANa7nNZZVD
TIMESTAMP	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
TIMESTAMP_DERIVED	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
URI	**Type** String **Description** The URI of the page that's receiving the request. **Example** `/home/home.jsp`
URI_ID_DERIVED	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
USER_ID	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** `00530000009M943`
USER_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API.

Field	Details
	Example 0059000000I1SNIA0
USER_TYPE	**Type** String **Description** The type of Salesforce user.
WAVE_SESSION_ID	**Type** String **Description** The ID of a particular session of Analytics. Use this field to determine which log lines originated from a particular session.
WAVE_TIMESTAMP	**Type** Number **Description** The time at which this log line was generated.

Wave Interaction Event Type

Wave Interaction events represent route or page changes made in the Salesforce Einstein Analytics user interface. A Wave Interaction event type is captured when a tab is closed. It also collates the interaction statistics over the life of the tab, including total open time, read time, and so on. These statistics are aggregated as you go to other tabs and return, and logged only once when the tab is closed.

Note: Because Wave Interaction events are logged only when the tab or browser window is closed, these events might not match Wave Change events exactly if a user allows their Salesforce session to time out before closing.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
CLIENT_IP	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: 96.43.144.26.

CPU_TIME	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.
EVENT_TYPE	**Type** String **Description** The type of event. The value is always `WaveInteraction`.
LOGIN_KEY	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: `GeJCsym5eyvtEK2I`.
NUM_CLICKS	**Type** Number **Description** The number of clicks performed on a page in the Analytics user interface.
NUM_SESSIONS	**Type** Number **Description** The number of times a user returned to a particular page.
ORGANIZATION_ID	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
READ_TIME	**Type** Number **Description** The amount of time a user spent on a particular tab.

RECORD_ID	**Type** String **Description** The Salesforce ID of the Analytics object.
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. For example: 3nWgxWbDKWWDIk0FKfF5DV.
RUN_TIME	**Type** Number **Description** The amount of time that the request took in milliseconds.
SESSION_KEY	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For example: d7DEq/ANa7nNZZVD.
TAB_ID	**Type** String **Description** The ID of the particular Analytics tab in the user interface. **Example** dashboard-0FKB0000000Ec64GDK
TIMESTAMP	**Type** String **Description** The access time of Salesforce services in GMT. For example: 20130715233322.670.
TIMESTAMP_DERIVED	**Type** DateTime

Field	Details
	Description The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`TOTAL_TIME`	**Type** Number **Description** The total amount of time a tab was open in milliseconds.
`TYPE`	**Type** String **Description** The Analytics object type.
`URI`	**Type** String **Description** The URI of the page that's receiving the request. For example: `/home/home.jsp`.
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: `00590000000I1SNIA0`.

WAVE_SESSION_ID	**Type** String **Description** The ID of a particular session of Analytics. Use this field to determine which log lines originated from a particular session.
WAVE_TIMESTAMP	**Type** Number **Description** The time at which this log line was generated.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Wave Performance Event Type

Wave Performance events help you track trends in your Analytics performance.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
CLIENT_IP	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". For example: `96.43.144.26`.
CPU_TIME	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.
EPT	**Type** Number **Description** The experienced page time in milliseconds.

EVENT_TYPE	**Type** String **Description** The type of event. The value is always `WavePerformance`.
LOGIN_KEY	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. For example: `GeJCsym5eyvtEK2I`.
NAME	**Type** String **Description** The asset title or query string.
ORGANIZATION_ID	**Type** Id **Description** The 15-character ID of the organization. For example: `00D000000000123`. **Example**
QUERY_ID	**Type** String **Description** This field is deprecated in API version 50.0. The number of queries can be determined using the Uri Event type logs, referenced here on page 1359
RECORD_ID	**Type** String **Description** The Salesforce ID of the Analytics object.
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`.

Field	Details
	For example: `3nWgxWbDKWWDIk0FKfF5DV`.
`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For example: `d7DEq/ANa7nNZZVD`.
`TAB_ID`	**Type** String **Description** The ID of the particular Analytics tab in the user interface. **Example** dashboard-0FKB0000000Ec64GDK
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services in GMT. For example: `20130715233322.670`.
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). For example: `2015-07-27T11:32:59.555Z`. Timezone is GMT.
`TYPE`	**Type** String **Description** The Analytics object type.
`URI`	**Type** String

	Description The URI of the page that's receiving the request. For example: `/home/home.jsp`.
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. For example: `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. For example: `00590000000I1SNIA0`.
`WAVE_SESSION_ID`	**Type** String **Description** The ID of a particular session of Analytics. Use this field to determine which log lines originated from a particular session.
`WAVE_TIMESTAMP`	**Type** Number **Description** The time at which this log line was generated.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

EventRelation

Represents a person (a user, lead, or contact) or a resource (such as a conference room) invited to an event. This object lets you add or remove invitees from an event and use the API to manage invitees' responses to invitations. If Shared Activities is enabled, EventRelation can also represent other objects that are related to an event. EventRelation does not support triggers, workflow, or data validation rules.

EventRelation allows a variable number of relationships and handles deleted events differently, depending on whether Shared Activities is enabled.

A non-recurring event can have up to 1,000 invitees. A recurring event can have up to 100 invitees.

If Shared Activities Isn't Enabled

- EventRelation records only represent invitees (contacts, users, and resources).
- An event can be related to one contact or lead.

If Shared Activities Is Enabled

- EventRelation records can represent:
  - Invitees (`IsInvitee=` is set to `true`)

    OR

  - Related contacts or lead (`IsParent` is set to `true`)
- An event can be related to up to 50 contacts or one lead. These people may or may not be invitees. The number of allowed invitees is not affected by the number of related contacts. If a contact or lead is also an invitee, there is one EventRelation record for that person with `IsInvitee` and `IsParent` are set to `true`.
- An event can be related to a lead, contact, resource, account, or opportunity.
- An event can be related to a custom object that has the `HasActivities` attribute set to `true`.
- If you delete an event, then relations between the event and any specified contacts, leads, and other records are also deleted.
- If you delete the EventRelation record representing a relation then the corresponding relation field may be cleared on the event.
- If you delete the EventRelation record representing the `WhoId` on an event, then another Who, if any, from the event's `EventWhoIds` field will be promoted to the `WhoId`.
- If you restore a deleted event, relations between the event and any specified contacts, leads, and records are also restored. The `WhoId`, `WhatId`, and `AccountId` field values are recalculated using the field values on EventRelation.

Whether or not Shared Activities is enabled, an event can be related to one other kind of record, such as an account, an opportunity, or a custom object.

Note:

- With API versions 26.0 and later, the EventRelation object replaces the EventAttendee object, and the EventAttendee object is no longer visible. You can still query the EventAttendee object using packages that support API versions 25.0 and earlier, or by using Apex.
- An EventRelation object can't be created for a child event.
- EventRelation includes deactivated users.
- In API versions 25.0 and earlier, you can't use `query()`, `delete()`, or `update()` with events related to more than one contact.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`AccountId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Contains the Account ID of the relation. For information on IDs, see ID Field Type. `AccountId` is visible when Shared Activities is enabled.
`EventId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Contains the ID of the event. This value can't be changed after it's been specified.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is `Deleted`.
`IsInvitee`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the relation is an invitee. • `IsInvitee` is visible while Shared Activities is being enabled, after it has been enabled, and while it is being disabled. • `IsInvitee` defaults to `true` while Shared Activities is being enabled, after it has been enabled, and while it is being disabled if `IsInvitee`, `IsParent`, and `IsWhat` are not set. This configuration ensures compatibility when Shared Activities isn't enabled and EventRelation represents event invitees only.

Field	Details
	• `IsInvitee` defaults to `false` when Shared Activities is enabled if `IsParent` is set to `true`.
`IsParent`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** `IsParent` is visible only when Shared Activities is enabled. When `false`, indicates that the relation is an invitee (a contact, lead, or user). When `true`, indicates that the relation is a Who or What, as determined by `IsWhat` field.
`IsWhat`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** `IsWhat` is visible only when Shared Activities is enabled. The value is relevant only if `IsParent` is `true`. When `IsWhat` is `true`, the relation specified by `RelationId` is a What (an account, opportunity, custom object, etc.). When `IsWhat` is `false`, the relation specified by `RelationId` is a Who (a contact, lead, or user).
`RelationId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Contains the ID of the person (User, Contact, or Lead) or the resource invited to an event. When Shared Activities is enabled, `RelationId` can also contain the ID of an account, opportunity, or other object related to an event. This value can’t be changed after it’s been specified.
`RespondedDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Indicates the most recent date and time when the invitee responded to an invitation to an event.
`Response`	**Type** string

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** Contains optional text that the invitee can enter when responding to an invitation to an event.
`Status`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates the invitee status with one of the following values: • `New`: Invitee has received the invitation but hasn't yet responded. This value is the default. • `Declined`: Invitee has declined the invitation. • `Accepted`: Invitee has accepted the invitation. Note: `Uninvited` and `Maybe` aren't currently supported.

Usage

- Invitee related lists display slightly different content. In the Salesforce mobile app, the invitee related list includes invitees only, whereas in the full site, it also includes the event owner. To reproduce the full site functionality in the Salesforce mobile app, use the following API queries.

  If you use Shared Activities in your Salesforce org, use this query:

  ```
  SELECT RelationId FROM EventRelation WHERE isInvitee = true AND eventId='[Event_Id]'
  ```

  where *`Event_Id`* is the child event's ID.

  If you don't use Shared Activities, use this query:

  ```
  SELECT RelationId FROM EventRelation WHERE eventId='[Event_Id]'
  ```

  These queries get the main event's relations and display them for the given child event. To further filter the results, add a `WHERE` clause.

Assigning resource attendance status

You can add a resource to an event only when the resource is available. The only attendance status that can be assigned to resources is Accepted. Events can't be saved when resources you've added aren't available.

Create an invitee if Shared Activities is enabled (or during the process of enabling it or rolling back)

If the invitee is already a contact or lead, update `IsInvitee to true`.

If the invitee is not already a contact or lead, create an EventRelation object for the invitee with `IsInvitee` set to `true`.

Create an invitee if Shared Activities is not enabled

Create an EventRelation object for the invitee.

Insert a contact or lead relation

```
EventRelation er = new EventRelation(EventId = '00UD0000005zijH',
    RelationId = '003D000000Q8aeV', isParent = true, isInvitee = false);
insert er;
```

Determine what events a given invitee is attending

To determine all the events that a particular person is attending during a given time period (for example, next week), you can have a client application query the Event object for a given date range, iterate through the results, and, for each event, query the EventRelation object to determine whether the particular person (`RelationId`) has accepted an invitation to that event.

Insert an invitee relation

If `isParent`, `isWhat` and `IsInvitee` are not set, and `RelationId` is a contact, lead, user, or calendar, `IsInvitee` defaults to `true`. This means if an EventRelation isn't specifically inserted as a relation to a contact or lead, it's treated as an Invitee relation by default.

```
EventRelation er = new EventRelation(EventId = '00UD0000005zijH',
    RelationId = '003D000000Q8adV');
insert er;
```

Query relations to a contact or a lead

```
List<EventRelation> whoRelations = [SELECT Id, Relation.Name FROM
    EventRelation WHERE EventId = '00UD0000005zijD' AND isParent = true AND isWhat =
false];
```

Query invitee relations

```
List<EventRelation> inviteeRelations = [SELECT Id, Relation.Name FROM
    EventRelation WHERE EventId = '00UD0000005zijD' AND isInvitee = true];
```

Update an invitee relation to a contact or lead invitee relation

```
EventRelation er = [SELECT Id FROM EventRelation WHERE EventId =
    '00UD0000005zijD' AND isInvitee = true and isParent = false LIMIT 1];
er.isParent = true;
update er;
```

Update a contact or lead relation to a contact or lead invitee relation

```
EventRelation er = [SELECT Id FROM EventRelation WHERE EventId =
    '00UD0000005zijD' AND isParent = true and isInvitee = false LIMIT 1];
er.isInvitee = true;
update er;
```

Reproduce invitee related list functionality in the Salesforce mobile app

Invitee related lists display slightly different content in the Salesforce mobile app and the full site. In the app, the invitee related list includes invitees only, whereas in the full site, it also includes the event owner.

If you use Shared Activities in your Salesforce org, use the following query to reproduce the full site functionality in the Salesforce mobile app:

```
SELECT RelationId FROM EventRelation WHERE isInvitee = true AND eventId='[Event_Id]'
```

where *`Event_Id`* is the child event's ID.

If you don't use Shared Activities, use this query:

```
SELECT RelationId FROM EventRelation WHERE eventId='[Event_Id]'
```

These queries get the main event's relations and display them for the given child event. To further filter the results, add a `WHERE` clause.

Send email notifications

To send email notifications for a given event, query EventRelation for the event, iterate through the list, examine the status, and send email notifications to every person who accepted the invitation.

Syncing Events with Lightning Sync

Attendee statuses (Accepted or Maybe, Declined, or No Response) sync from Microsoft® Exchange or Google to Salesforce, but not from Salesforce to Exchange or Google. Be wary of creating API flows that update attendee status in Salesforce for users set up to sync both ways. Eventually the original Exchange or Google status overrides the update made in Salesforce.

SEE ALSO:

Event

EventWhoRelation

Object Basics

EventBusSubscriber

Represents a trigger, process, or flow that's subscribed to a platform event or a change data capture event. Doesn't include CometD subscribers.

Supported Calls

`describeSObjects()`, `query()`

Special Access Rules

EventBusSubscriber is read only and can only be queried. As of Summer '20 and later, only your Salesforce org's internal users can access this object.

Fields

Field	Details
`ExternalId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ID of the subscriber. For example, the trigger ID.

Field	Details
LastError	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The error message that the last thrown `EventBus.RetryableException` contains. This field applies to Apex triggers only. Available in API version 43.0 and later.
Name	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the subscribed item, such as the trigger or process name. If the subscribed item's name is "Process", at least one flow Pause element is subscribed to the event.
Position	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The replay ID of the last event that the subscriber processed.
Retries	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of times the trigger was retried due to throwing the `EventBus.RetryableException`. This field applies to Apex triggers only. Available in API version 43.0 and later.
Status	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Indicates the status of the subscriber. Can be one of the following values: • `Running`—The subscriber is actively listening to events. If you modify the subscriber, the subscription continues to process events. • `Error`— The subscriber was disconnected and stopped receiving published events. A trigger reaches this state when it exceeds the number of maximum retries with the

Field	Details
	EventBus.RetryableException. Trigger assertion failures and unhandled exceptions don't cause the error state. We recommend limiting the retries to fewer than nine times to avoid reaching this state. When you fix and save the trigger, or for a managed package trigger, if you redeploy the package, the trigger resumes automatically from the tip, starting from new events. Also, you can resume a trigger subscription in the subscription detail page that you access from the platform event page. • Suspended—The subscriber is disconnected and can't receive events because a Salesforce admin suspended it or due to an internal error. You can resume a trigger subscription in the subscription detail page that you access from the platform event page. To resume a process, deactivate it and then reactivate it. If you modify the subscriber, the subscription resumes automatically from the tip, starting from new events. For more information, see View and Manage an Event's Subscribers on the Platform Event's Detail Page in the *Platform Events Developer Guide*.
Tip	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The replay ID of the last published event. Note: For high-volume platform events and change events, the value for Tip isn't available and is always -1.
Topic	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the subscription channel that corresponds to a platform event or change event. For a platform event, the topic name is the event name appended with __e, such as MyEvent__e. For a change event, the topic is the name of the change event, such as AccountChangeEvent.
Type	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The subscriber type (ApexTrigger). If the subscriber is a process or flow Pause element, the type is blank.

Usage

Use EventBusSubscriber to query details about subscribers to a platform event. You can get all subscribers for a particular event by filtering on the `Topic` field, as follows.

```
SELECT ExternalId, Name, Position, Status, Tip, Type
FROM EventBusSubscriber
WHERE Topic='Low_Ink__e'
```

EventTag

Associates a word or short phrase with an Event.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ItemId`	**Type** reference **Properties** Create, Filter **Description** ID of the tagged item.
`Name`	**Type** string **Properties** Create, Filter **Description** Name of the tag. If this value does not already exist, a new TagDefinition is created and becomes the parent of this Tag object. Otherwise, a TagDefinition with the same name becomes the parent of this Tag object. Parent relationships are created automatically.
`TagDefinitionId`	**Type** reference **Properties** Filter **Description** ID of the parent TagDefinition object that owns the tag.

Field Name	Details
`Type`	**Type** picklist **Properties** Create, Filter, Restricted picklist **Description** Defines the visibility of a tag. Valid values: • `Public`—The tag can be viewed and manipulated by all users in an organization. • `Personal`—The tag can be viewed or manipulated only by a user with a matching `OwnerId`.

Usage

EventTag stores the relationship between its parent TagDefinition and the Event being tagged. Tag objects act as metadata, allowing users to describe and organize their data.

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

EventWhoRelation

Represents the relationship between an event and a lead or contacts. This derived object is a filtered version of the EventRelation on page 1386 object; that is, IsParent is `true` and IsWhat is `false`. It doesn't represent relationships to invitees or to accounts, opportunities, or other objects. This object is available in API versions 29.0 and later.

EventWhoRelation allows a variable number of relationships: one lead or up to 50 contacts. Available only if you've enabled Shared Activities for your organization.

Note: EventWhoRelation objects aren't created for child events.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`EventId`	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description Indicates the ID of the event.
RelationId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the contacts or lead related to the event.
Type	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Indicates whether the person related to the event is a contact or lead.

Usage

Apex example that queries relations to a contact or lead

```
List<EventWhoRelation> whoRelations = [SELECT Id, Relation.Name FROM
EventWhoRelation WHERE EventId = '00UD0000005zijD'];
```

SEE ALSO:

Event
EventRelation

Expense

Represents an expense linked to a work order. Service resource technicians can log expenses, such as tools or travel costs. This object is available in API version 49.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
AccountId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the account associated with the linked work order.
Amount	**Type** currency **Properties** Create, Filter, Sort, Update **Description** The amount of the expense.
CurrencyIsoCode	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only if the multicurrency feature is enabled. Contains the ISO code for any currency allowed by the organization.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** A description for the expense.
Discount	**Type** percent **Properties** Create, Filter, Nillable, Sort, Update **Description** The percentage deducted from the `Subtotal` price. Available in version 51.0 and later.
ExpenseEndDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description If the expense was incurred over multiple days, the Expense End Date is the last day that the expense covers.
ExpenseNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The number that uniquely identifies the expense.
ExpenseStartDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** If the expense was incurred over multiple days, the Expense Start Date is the first day that the expense covers.
ExpenseType	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The type of expense. Possible values are: • Billable • Non-Billable The default value is Billable.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort

Field	Details
	Description The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the user who owns the expense record.
`Quantity`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The number of items purchased in this record. Available in version 51.0 and later.
`Subtotal`	**Type** currency **Properties** Filter, Nillable, Sort **Description** The subtotal price calculated as the product of `Quantity` and `UnitPrice`. Available in version 51.0 and later. This is a calculated field.
`Title`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A title that identifies the expense. This field is available in API version 50.0 and later.
`TotalPrice`	**Type** currency **Properties** Filter, Nillable, Sort

Field	Details
	Description The total price of the transaction which is equal to the discounted subtotal: `Subtotal - (Discount * Subtotal)`. Available in version 51.0 and later. This is a calculated field.
`TransactionDate`	**Type** date **Properties** Create, Filter, Group, Sort, Update **Description** The day that the expense was incurred, or the payment date for the expense.
`UnitPrice`	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** The price of one item on the record. Available in version 51.0 and later.
`WorkOrderId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the work order associated with the expense.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ExpenseFeed
Feed tracking is available for the object.

ExpenseHistory
History is available for tracked fields of the object.

ExpenseOwnerSharingRule
Sharing rules are available for the object.

ExpenseShare
Sharing is available for the object.

ExpenseReport

Represents a report that summarizes expenses. This object is available in API version 50.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only if the multicurrency feature is enabled. Contains the ISO code for any currency allowed by the organization.
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** A description for the expense report.
`ExpenseReportNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** An auto-generated number identifying the expense report.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.

Field	Details
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the user who owns the expense report record.
Title	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A title that identifies the expense report.
TotalExpenseAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** The sum of all expense entries in the report. This is a calculated field.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ExpenseReportFeed
Feed tracking is available for the object.

ExpenseReportHistory
History is available for tracked fields of the object.

ExpenseReportShare
Sharing is available for the object.

ExpenseReportEntry

Represents an entry in an expense report. This object is available in API version 50.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`Amount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** The amount of the expense.
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only if the multicurrency feature is enabled. Contains the ISO code for any currency allowed by the organization.
`ExpenseId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The expense that corresponds to the expense report entry.
`ExpenseReportEntryNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** An auto-generated number identifying the expense report entry.

Field	Details
ExpenseReportId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The expense report that's associated with the expense report entry.
ExpenseType	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** The type of expense. Possible values are: • Billable • Non-Billable The default value is Billable.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
Title	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A title that identifies the expense.
TransactionDate	**Type** date

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** The day that the expense was incurred, or the payment date for the expense.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ExpenseReportEntryFeed
Feed tracking is available for the object.

ExpenseReportEntryHistory
History is available for tracked fields of the object.

ExpressionFilter

Represents a logical expression that's used to control the execution of macro instructions. This object is available in API version 46.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`ContextId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. The ID of the MacroInstruction object that contains the expression.
`FilterConditionLogic`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Optional. The filter conditions to use and the order in which to apply them. For example, '1 AND 2' evaluates condition 1 and then condition 2.

Field	Details
FilterDescription	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Optional. A description of the filter expression that helps to explain the logic to users. For example, 'Applies to New cases.'
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** Optional. A label for the expression.

Usage

The ExpressionFilter object is used with the `IF` and `ELSEIF` operations in a MacroInstruction. It lets you specify a logical expression that determines whether macro instructions are executed. The object indicates whether any or all conditions must be true.

To represent the conditions that are evaluated, this object uses one or more ExpressionFilterCriteria child objects. The ExpressionFilter to be used with each criteria is specified in the ExpressionFilterCriteria's ExpressionFilterId field.

For example, to represent the following conditional statement, the ExpressionFilter object specifies the `FilterConditionLogic` field as `1 AND 2`, where 1 and 2 are ExpressionFilterCriteria objects. In this example, condition 1 is `Case.Status EQUALS New`, and condition 2 is `Case.Origin EQUALS Phone`.

```
IF (Case.Status EQUALS New) AND (Case.Origin EQUALS Phone)
      Select Email QuickAction
      Set Subject…
      Set To…
      Set Body…
      Submit
ENDIF
```

ExpressionFilterCriteria

Represents a condition in an expression that's used to control the execution of macro instructions. This object is available in API version 46.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`ExpressionFilterId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. The ID of the ExpressionFilter object that references this condition.
`FilterTarget`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Required. The target object or field used in the condition. For example, to create a condition that applies to new cases, use `Case.Status` as the `FilterTarget`.
`FilterTargetValue`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Optional. The value that's compared to the value of the FilterTarget. For example, to create a condition that applies to new cases, use `New` as the `FilterTargetValue`.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** Optional. A label for the condition.
`Operation`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. Specifies the operator used to compare the target field and the target value. For example, to create a condition that applies to new cases, use EQUALS for the `Operation` field, as in `Case.Status EQUALS New`. • `EQUALS`

Field	Details
	• NOTEQUALS • CONTAINS • NOTCONTAIN
SortOrder	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Required. The order in which the criteria are evaluated.

Usage

ExpressionFilterCriteria is a child object of the ExpressionFilter object. Use these objects with the `IF` and `ELSEIF` operations in a MacroInstruction to control instruction execution. Each condition in a ExpressionFilterCriteria compares a target object or field to a value using a condition operator; for example, `Case.Status EQUALS New`.

ExternalAccountHierarchy

Represents the external account hierarchy, which works like a role-based hierarchy. Use ExternalAccountHierarchy to allow partner and customer users to share data with other external accounts in their hierarchy.This object is available in API version 49.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

You must have a Partner or Customer Community Plus license.

Fields

Field	Details
AccountId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the account in the external account hierarchy.

Field	Details
CurrencyISOCode	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Possible values are: • `GBP`— British Pound • `USD`— U.S. Dollar The default value is `USD`.
`Description`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The description of the external account hierarchy.
`HierarchyType`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Possible values are: • `CustomerPortal` — Customer • `Partner` The default value is `Partner`.
`IsAccessibleToParent`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Allows data to be shared with parent account in the account hierarchy. The default value is `true`.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description When true, the hierarchy is turned on. The default value is `false`.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Name of the external account hierarchy.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the account owner.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the parent account.

ExternalAccountHierarchyHistory

Represents the history of changes to values in the fields of an external account hierarchy. This object is available in API version 50.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Special Access Rules

You must have a Partner or Customer Community Plus license.

Fields

Field	Details
`DataType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Possible values are: • Address • AnyType • AutoNumber • Base64 • BitVector • Boolean • Content • Currency • DataCategoryGroupReference • DateOnly • DateTime • Division • Double • DynamicEnum • Email • EncryptedBase64 • EncryptedText

Field	Details
	• EntityId • EnumOrId • ExternalId • Fax • File • HtmlMultiLineText • HtmlStringPlusClob • InetAddress • Json • Location • MultiEnum • MultiLineText • Namespace • Percent • PersonName • Phone • Raw • RecordType • SfdcEncryptedText • SimpleNamespace • StringPlusClob • Switchable_PersonName • Text • TimeOnly • Url • YearQuarter
ExternalAccountHierarchyId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the external account hierarchy.
Field	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort

Field	Details
	Description Possible values are: • Account • HierarchyType - Hierarchy Type • IsAccessibleToParent - Is Accessible to Parent • IsActive - Is Hierarchy Active • Name • Owner • Parent • Created - Created. • FeedEvent - Feed Event • IndividualMerged - Individual Merged • Locked - Record Locked • OwnerAccepted - Owner (Accepted) • OwnerAssignment - Owner (Assignment) • Unlocked - Record unlocked
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The updated value of the changed field.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The previous value of the changed field.

ExternalDataSource

Represents an external data source, which defines connection details for integration with data and content that are stored outside the Salesforce org. This object is available in API version 27.0 and later.

Note: All credentials stored within this entity are encrypted under a framework that is consistent with other encryption frameworks on the platform. Salesforce encrypts your credentials by auto-creating org-specific keys. Credentials encrypted using the previous encryption scheme have been migrated to the new framework.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

As of Spring ’20 and later, only authenticated internal and external users can access this object.

Fields

Field Name	Details
`AuthProviderId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Salesforce ID of the authentication provider, which defines the service that provides the login process and approves access to the external system. Only users with the “Customize Application” and “Manage AuthProviders” permissions can view this field. This field is available in API version 39.0 and later.
`CustomConfiguration`	**Type** textarea **Properties** Nillable **Description** A JSON-encoded configuration string that defines parameters specific to the type of external data source.
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object’s name in a managed package and the changes are reflected in a subscriber’s organization.

Field Name	Details
	Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`Endpoint`	**Type** textarea **Properties** Nillable **Description** The URL of the external system, or if that URL is defined in a named credential, the named credential URL. A named credential URL contains the scheme `callout:`, the name of the named credential, and an optional path. For example: `callout:`*`My_Named_Credential`*`/`*`some_path`*. You can append a query string to a named credential URL. Use a question mark (?) as the separator between the named credential URL and the query string. For example: `callout:`*`My_Named_Credential`*`/`*`some_path`*`?format=json`.
`isWritable`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Lets the Lightning Platform and users in this org create, update, and delete records for external objects associated with the external data source. The external object data is stored outside the org. By default, external objects are read only. Available only for Salesforce Connect external data sources. Available in API version 35.0 and later. However, with the cross-org adapter for Salesforce Connect, you can set this field to `true` only in API version 39.0 and later.
`Language`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language of the `MasterLabel`.
`MasterLabel`	**Type** string **Properties** Filter, Group, Sort **Description** Master label for the external data source. This internal label doesn't get translated.

Field Name	Details
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation.
PrincipalType	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Specifies whether the org uses one set (`NamedUser`), multiple sets (`PerUser`), or no (`Anonymous`) credentials to access the external system. Each set of credentials corresponds to a login account on the external system. Corresponds to `Identity Type` in the user interface.
Protocol	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Specifies whether to use OAuth, password authentication, or no authentication to access the external system. Some types of external data sources support only one value. • For cloud-based Files Connect external systems, select **Oauth 2.0**. • For on-premises systems, select **Password Authentication**. • For Simple URL data sources, select **No Authentication**.
Repository	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Used for SharePoint Online. An optional name of the repository in the data source. Not applicable to all data source types.
Type	**Type** picklist

Field Name	Details
	Properties Filter, Group, Restricted picklist, Sort **Description** Specifies the adapter that connects to the external system.

Usage

Define an external data source to connect to data or content that's stored outside the Salesforce org. Then create external objects, which map to the external system's data and behave similarly to custom objects.

Note: Some external data source fields rely on per-user authentication to connect with an external system. If an admin edits one of these fields, then the previously authenticated credentials can get invalidated, requiring individual users to reauthenticate.

SEE ALSO:

ExternalDataUserAuth

NamedCredential

ExternalDataUserAuth

Stores authentication settings for a Salesforce user to access an external system. The external system must be defined in an external data source or a named credential that's configured to use per-user authentication. This object is available in API version 27.0 and later.

Note: All credentials stored within this entity are encrypted under a framework that is consistent with other encryption frameworks on the platform. Salesforce encrypts your credentials by auto-creating org-specific keys. Credentials encrypted using the previous encryption scheme have been migrated to the new framework.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AuthProviderId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Salesforce ID of the authentication provider, which defines the service that provides the login process and approves access to the external system.

Field Name	Details
	Only users with the “Customize Application” and “Manage AuthProviders” permissions can view this field. This field is available in API version 39.0 and later.
ExternalDataSourceId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Salesforce ID of the external data source or named credential that defines the external system.
Password	**Type** textarea **Properties** Create, Nillable, Update **Description** Password portion of the credentials for the Salesforce user to access the external system.
Protocol	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Specifies whether to use OAuth, password authentication, or no authentication when the user accesses the external system.
UserId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** ID of the Salesforce user who’s accessing the external system.
Username	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Username portion of the credentials for the Salesforce user to access the external system.

Usage

These authentication settings enable a Salesforce user to access an external system. The external system is defined in Salesforce as one of the following.

- External data source—Provides access to external objects, whose data is stored outside the Salesforce organization.
- Named credential—Enables the user's actions to trigger authenticated callouts to the endpoint that's specified in the named credential.

If you grant users access to the external data source or named credential via permission sets or profiles, those users can manage their own authentication settings. See "Store Authentication Settings for External Systems" in the Salesforce Help.

SEE ALSO:

ExternalDataSource

NamedCredential

ExternalSocialAccount

Represents a managed social media account on a social network such as Facebook or Twitter. This object is available in API version 29.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`AuthorizedBy`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of the Radian6 user who added the social account to Radian6.
`DataSourceId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** ID of the Radian6 data source for the social account.
`DefaultResponseAccountId`	**Type** reference

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** ID of the managed social account to use by default when responding.
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The unique name of the record in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This field is automatically generated but you can supply your own value if you create the record using the API. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`ExternalAccountId`	**Type** string **Properties** Filter, Group, Sort **Description** ID of the social account on the social network.
`ExternalPictureURL`	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** URL to the picture of the social account on the social network.
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Specifies whether the social account is active or not.

Field Name	Details
IsAuthenticated	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Specifies whether the social account is authenticated or not.
IsCaseCreationEnabled	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Specifies whether case creation for the social account is enabled or not.
IsDataSourceActive	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Specifies whether the data source is active or not.
Language	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Specifies the language of the social account.
MasterLabel	**Type** string **Properties** Filter, Group, Sort **Description** Master label for the social account. This display value is the internal label and does not get translated.
ProfileUrl	**Type** url **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description URL for the profile.
Provider	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Social network, such as Facebook or Twitter, of the social account.
ProviderUserId	**Type** string **Properties** Filter, Group, Sort **Description** User ID for the social network of the social account.
RuleId	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** ID of the Radian6 rule for the account.
SocialPropertyId	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** ID of the Radian6 social property for the account.
TopicId	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** ID of the topic for the social account.
UniqueName	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description Unique name for the social account.
`Username`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Username for the social account.

Usage

Although available, many of the Radian6-related fields are no longer accurate or used. We recommend using Social Engagement Resources in *Connect REST API Developer Guide*.

FeedAttachment

Represents an attachment to a feed item, such as a file attachment or a link. Use FeedAttachment to add various attachments to one feed item. This object is available in API version 36.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `idEnabled()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- You can read, create, update, or delete a FeedAttachment only if you have the corresponding access to the associated FeedItem.
- Inline images aren’t creatable, updatable, or deletable through SOAP API.

Fields

Field Name	Details
`FeedEntityId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the associated feed entity that contains this attachment.

Field Name	Details
RecordId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the record that this feed attachment contains. For inline images, `RecordId` is a ContentDocument ID. For content attachments, `RecordId` is a ContentVersion ID, For feed items, `RecordId` is a FeedItem ID.
Title	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The title of this feed attachment. When `Type` is `Link`, `Title` value is the label for the attachment link. Otherwise, `Title` value isn't used.
Type	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The type of this feed attachment. Valid values are: • 0 `Content`—A content attachment. • 1 `InlineImage`—An inline image. The system creates an inline image attachment when an image is added to the body of the associated FeedItem. You can't add an inline image directly using FeedAttachment. • 2 `Link`—A link. • 3 `FeedEntity`—A feed entity, for example, a post that is shared. Available in API version 39 and later in Lightning Experience. • 4 `ChatterExtension`—a Rich Publisher App that's integrated with the Chatter publisher. • 5 `Record`—A record.
Value	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** The string value of this FeedAttachment. This field is optional. If the feed attachment is a Link FeedAttachment, the value is the link URL string.

Usage

- This Apex example shows how to add an attachment to a Lead using API version 36.0 and later. First, post a feed item.

  ```
  //create and insert post
  FeedItem post = new FeedItem();
  post.Body = 'HelloThere';
  post.ParentId = 'ID_OF_LEAD_ENTITY';
  post.Title = 'FileName';
  insert post;
  ```

  Then insert the attachment.

  ```
  //create and associate a content attachment to the post
  FeedAttachment feedAttachment = new FeedAttachment();
  feedAttachment.FeedEntityId = post.Id;
  feedAttachment.RecordId = 'ID_OF_CONTENT_VERSION';
  feedAttachment.Title = 'FileName';
  feedAttachment.Type = 'CONTENT';
  insert feedAttachment;
  ```

- You can create only one link attachment (`FeedAttachment` of type `Link`) per feed item.
- If the feed item type is one of the following, you can add content or link feed attachments to a FeedItem.
  - `AdvancedTextPost`
  - `TextPost`
  - `ContentPost`
  - `LinkPost`
  - `QuestionPost`
- When a `FeedAttachment` is added or removed from a feed item, Salesforce updates the type of the feed item to its most appropriate value, as follows.
  - If all content feed attachments are removed from a feed item of type `ContentPost`, the type of this feed item is updated to `TextPost`.
  - Conversely, if a content feed attachment is added to a feed item of type `TextPost`, the type of this feed item is updated to `ContentPost`.
  - If all link feed attachments are removed from a feed item of type `LinkPost`, the type of this feed item is updated to `TextPost`.
  - Conversely, if a link feed attachment is added to a feed item of type `TextPost`, the type of this feed item is updated to `LinkPost`.
  - The type of all other feed items, such as `QuestionPost` or `AdvancedTextPost` feed items, doesn't change when any feed attachments are added or removed.
  - If a content feed attachment is added to a feed item of type `LinkPost`, the feed item type is updated to `ContentPost`.
  - If all content attachments are removed from a feed item of type `ContentPost`, but there's also a link attachment, the feed item type is updated to `LinkPost`.
- Users without administrator privileges can't retrieve a FeedAttachment by its ID in a SOQL query. They can retrieve attachments by specifying the associated `FeedEntityId`, as follows:

  ```
  SELECT Id FROM FeedAttachment WHERE FeedEntityId = 'some_feedItem_id'
  ```

- Alternatively, retrieve attachments by using a SOQL query on FeedItem with a subquery on the FeedAttachments child relationship, as follows.

```
SELECT Body, (SELECT RecordId, Title, Type, Value FROM FeedAttachments)
FROM FeedItem
WHERE Id = 'some_feedItem_id'
```

- FeedAttachment is not a triggerable object. You can access feed attachments in FeedItem *update* triggers by retrieving them through a SOQL query. For a trigger example, and to learn about trigger considerations for FeedAttachment, see Triggers for Chatter Objects in the *Apex Developer Guide*.

FeedComment

Represents a comment added to a feed by a user. This object is available in API version 18.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

Note the following when working with feed comments.

- You must have read access to the feed's parent type to see a FeedComment record.
- You must be able to access the feed to add a comment.
- If the comment is related to a user record, the user can delete the comment. For example, if John Smith makes a comment on Sasha Jones' profile feed, Sasha can delete the comment.
- If the context user has the Insert System Field Values for Chatter Feeds user permission, the `create` field property is available on `CreatedBy` and `CreatedDate` system fields. During migration, the context user can set these fields to the original post's author and creation date. The fields can't be updated after migration.

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- Modify All Data
- Modify All on the object associated with the feed and delete permission on the parent feed
- Moderate Chatter

  Note: Users with the Moderate Chatter permission can delete only the feed items and comments they can see.

- Manage Unlisted Groups

  Only users with this permission can delete items in unlisted groups.

Fields

Field	Details
CommentBody	**Type** textarea **Properties** Create, Filter, Sort, Update **Description** The text in the comment.
CommentType	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of comment: • ContentComment—an uploaded file on a comment • TextComment—a direct text entry on a comment Before API version 24.0, a text entry was required on a comment. As of version 24.0, a text entry is optional if the CommentType is ContentComment.
FeedItemId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the feed item containing the comment.
HasEntityLinks	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed CommentBody includes at least one link to a record. Note: This field is available starting in API version 43.0.
InsertedById	**Type** reference **Properties** Filter, Group, Sort

Field	Details
	Description ID of the user who added this item to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the context user.
`IsRichText`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the feed `CommentBody` contains rich text. If you post a rich text feed comment using SOAP API, set `IsRichText` to `true` and escape HTML entities from the body. Otherwise, the comment is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<a>` • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only through the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: This attribute is available as of API version 38.0. In API version 38.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 37.0 and prior, all rich text appears as a plain-text representation.
`IsVerified`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Determines whether a comment on a question is marked as Company Verified.

Field	Details
	This field is available in API version 41.0 and later.
`LastEditById`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the user who last edited the feed comment.
`LastEditDate`	**Type** datetime **Properties** Create, Filter, Nillable, Sort **Description** The date the feed comment was last edited.
`ParentId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of a record associated with the feed comment. For example, if you are commenting on a change to a field on Account, `ParentId` is set to the account ID.
`RelatedRecordId`	**Type** reference **Properties** Create, Group, Nillable, Sort **Description** ID of the ContentVersion record associated with a `ContentComment`. This field is null for all comments except `ContentComment`. For example, set this field to an existing ContentVersion ID and set the `CommentType` to `ContentComment`.
`Revision`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort **Description** The number of times the comment was revised.

Field	Details
Status	**Type** picklist **Properties** Create, Defaulted on create, Group, Nillable, Restricted picklist, Sort, Update **Description** Specifies whether this feed comment is published and visible to all who can access the parent feed item. To change a comment’s status, the comment’s parent feed item must be in a published state. This field is available in API version 38.0 and later. Possible values are: • `Published`—The comment is visible to all who can access the parent feed item. • `PendingReview`—The comment is visible to its author. Users see the parent feed item and have View All Data or Can Approve Feed Post and Comment permission also see the comment. The author can delete the comment as can users who see the comment and have Can Approve Feed Post and Comment or Modify All Data permission. If the parent feed item is published, the author can edit the comment. Users who see the comment and have Can Approve Feed Post and Comment or Modify All Data permission can also edit the comment. Users with Can Approve Feed Post and Comment or Modify All Data permission can change comment status from Published to PendingReview and from PendingReview to Published. Some actions are blocked when a feed comment is pending review: – Select as Best—When a feed comment that is marked as best answer becomes unpublished, it’s removed as the best answer. If the comment is published, its best answer status is not restored. – Like and unlike
SystemModstamp	**Type** datetime **Properties** Defaulted on create, Filter **Description** Date and time when a user or automated process (such as a trigger) last modified this record. In this context, "trigger" refers to Salesforce code that runs to implement standard functionality, and not an Apex trigger. `SystemModstamp` is a read-only system field, available in FeedComment as of API version 37.0.
ThreadChildrenCount	**Type** int **Properties** Create, Filter, Group, Nillable, Sort **Description** The count of comments associated with this parent feed object. The feed object can be either a Feed Item or a Feed Comment. The count shows how many comments are directly

Field	Details
	subordinate to the parent. This field is available on the object when **Allow discussion threads** is selected in the Administration Workspace. This field is available in API version 44.0 and later.
`ThreadLastUpdatedDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort **Description** The date and time the thread on this comment was last updated. This field is available on the object when **Allow discussion threads** is selected in the Administration Workspace. This field is available in API version 44.0 and later.
`ThreadLevel`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort **Description** The identifier that shows the level of this Feed Comment in a thread. By default, there are a maximum of three levels in a thread. The `ThreadLevel` value shows in which of the three levels this comment falls. This field is available on the object when **Allow discussion threads** is selected in the Administration Workspace. This field is available in API version 44.0 and later.
`ThreadParentId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The identifier of the feed item that is the parent of this comment. This field is available on the object when **Allow discussion threads** is selected in the Administration Workspace. This field is available in API version 44.0 and later.

Usage

- As of API version 23.0 and later, if you have View All Data permission, you can query FeedComment records directly without an ID filter. If you don't have View All Data permission, you can't query FeedComment records directly, with or without an ID filter.

  For example, the following query returns general information about a feed:

  ```
  SELECT ID, CreatedDate, CreatedById, CreatedBy.FirstName,
             CreatedBy.LastName, ParentId, Parent.Name, Body
  FROM FeedItem
  WHERE CreatedDate > LAST_MONTH
  ORDER BY CreatedDate DESC, Id DESC
  ```

- You can search for text in comments using SOSL. For example, the following Java class uses `search()` to find the string "foo" in any field of a record:

```
public void searchSample() {
  try {
    SearchResult sr = connection.search("find {foo} in all fields " +
        "returning feedcomment(Id, FeedItemId, CommentBody)");
    // Put the results into an array of SearchRecords
    SearchRecord[] records = sr.getSearchRecords();
    // Check the length of the returned array of records to see
    // if the search found anything
    if (records != null && records.length > 0) {
      System.out.println("Found " + records.length + " comments: ");
      // Display each comment
      for (SearchRecord record : records) {
        FeedComment comment = (FeedComment) record.getRecord();
        System.out.println(comment.getId() + ": " +
            comment.getCommentBody());
      }
    } else {
      System.out.println("No records were found for the search.");
    }
  } catch (ConnectionException ce) {
    ce.printStackTrace();
  }
}
```

- If you use an Apex trigger to modify the `Body` of a FeedComment object, all mentions hyperlinks are converted to plain text. The mentioned users don't get email notifications.

Note: This object is hard deleted. It isn't sent to the Recycle Bin.

SEE ALSO:

Custom Object__Feed

FeedItem

FeedItem represents an entry in the feed, such as changes in a record feed, including text posts, link posts, and content posts. This object is available in API version 21.0 and later. This object replaces FeedPost.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `describeLayout()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

- You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:
  - Modify All Data

- Modify All on the feed item's parent object, for example, Account for a feed item on an account feed
- Moderate Chatter

  Note: Users with the Moderate Chatter permission can delete only the feed items and comments that they can see.

Only users with this permission can delete items in unlisted groups.

- Guest users can't insert system field values for Chatter feeds. Even if you try to assign the CanInsertFeedSystemFields permission to a Guest User, the permission isn't granted.

Only users with the Modify All Data permission can delete a feed item of `Type` `TrackedChange`.

If the context user has the Insert System Field Values for Chatter Feeds user permission, the `create` field property is available on `CreatedBy` and `CreatedDate` system fields. During migration, the context user can set these fields to the original post's author and creation date. The fields can't be updated after migration.

Fields

Field Name	Details
`BestCommentId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the comment marked as best answer on a question post.
`Body`	**Type** textarea **Properties** Create, Nillable, Sort, Update **Description** The body of the feed item. Required when `Type` is `TextPost` or `AdvancedTextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. Although a value for `Body` is not required for the `ContentPost` type, an attachment is required. If an attachment isn't present, the type changes to `TextPost` or `AdvancedTextPost`, depending on the API version. `TextPost` and `AdvancedTextPost` do require a value for `Body`. Tip: See the `IsRichText` field for a list of HTML tags supported in the body of rich text posts.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort

Field Name	Details
	Description The number of comments associated with this feed item. Tip: In a feed that supports pre-moderation, `CommentCount` isn't updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed, comments aren't counted until approved by an admin or someone with Can Approve Feed Post and Comment or Modify All Data. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until the end of comments is returned.
`ConnectionId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** When a PartnerNetworkConnection modifies a record that is tracked, the `CreatedBy` field contains the ID of the system administrator. The `ConnectionId` contains the ID of the PartnerNetworkConnection. Available if Salesforce to Salesforce is enabled for your org.
`ContentData`	**Type** base64 **Properties** Create, Nillable **Description** This field was removed in API version 35.0, and is available in earlier versions for backward compatibility only. This field is required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
`ContentDescription`	**Type** textarea **Properties** Create, Nillable, Sort **Description** This field was removed in API version 35.0, and is available in earlier versions for backward compatibility only. The description of the file specified in `ContentData`.

Field Name	Details
`ContentFileName`	**Type** string **Properties** Create, Group, Nillable, Sort **Description** This field was removed in API version 35.0, and is available in earlier versions for backward compatibility only. The name of the file uploaded to the feed. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.
`ContentSize`	**Type** int **Properties** Group, Nillable, Sort **Description** This field was removed in API version 35.0, and is available in earlier versions for backward compatibility only. This field is the size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
`ContentType`	**Type** string **Properties** Group, Nillable, Sort **Description** This field was removed in API version 35.0, and is available in earlier versions for backward compatibility only. This field is the MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
`FeedPostId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** This field was removed in API version 22.0, and is available in earlier versions for backward compatibility only. ID of the associated FeedPost. A FeedPost represents the following types of changes in a feed item: changes to tracked fields, text posts, link posts, and content posts.
`HasContent`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field Name	Details
	Description Indicates whether the feed item has content.
`HasFeedEntity`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item has a feed entity, for example, a post, as an attachment. Available in API version 39 and later when sharing a feed entity in Lightning Experience.
`HasLink`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item has a link attached.
`HasVerifiedComment`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Determines whether a question has an answer that is marked as Company Verified. This field is available in API version 41.0 and later.
`InsertedById`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user who added this item to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the context user.
`IsClosed`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field Name	Details
	Description As of API version 43, a read-only field that indicates whether the feed item is open or closed to new actions. A value of `true` places restrictions on the actions a user can take on a feed item and its comments. For more information, see the Usage section.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Standard system field. Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`).
`IsRichText`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the feed item `Body` contains rich text. If you post a rich text feed comment using SOAP API, set `IsRichText` to `true` and escape HTML entities from the body. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<a>` • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only through the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>`

Field Name	Details
	Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
`LastEditById`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the user who last edited the feed item.
`LastEditDate`	**Type** datetime **Properties** Create, Filter, Nillable, Sort **Description** The date the feed item was last edited.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of likes associated with this feed item.
`LinkUrl`	**Type** url **Properties** Create, Nillable, Sort **Description** The URL of a `LinkPost`.
`NetworkScope`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default Experience Cloud site, a specific Experience Cloud site, or all sites. This field is available in API version 26.0 and later, if digital experiences is enabled for your org. `NetworkScope` can have the following values:

Field Name	Details
	• `NetworkId`—The ID of the Experience Cloud site in which the FeedItem is available. If left empty, the feed item is only available in the default Experience Cloud site. • `AllNetworks`—The feed item is available in all Experience Cloud sites. Note the following exceptions for `NetworkScope`: • Only feed items with a Group or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`. • You can't filter a feed item on the `NetworkScope` field.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the object type to which the feed item is related. For example, set this field to a `UserId` to post to someone's profile feed, or an `AccountId` to post to a specific account.
`RelatedRecordId`	**Type** reference **Properties** Create, Group, Nillable, Sort **Description** ID of the ContentVersion record associated with a `ContentPost`. For WDC thanks posts, it's the ID of the WorkThanks object associated with a `RypplePost`. This field is typically null for all posts except `ContentPost` and `RypplePost`. For example, set this field to an existing ContentVersion ID and post it to a feed with `Type` set to `ContentPost`.
`Revision`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort **Description** The revision number of the feed item.
`Status`	**Type** picklist

Field Name	Details
	Properties Create, Defaulted on create, Group, Nillable, Restricted picklist, Sort, Update **Description** Specifies whether this feed item is published and visible to all who can access the feed. This field is available in API version 37.0 and later. Possible values are: • `Published`—The item's visible to all with access to the feed. • `PendingReview`—The item's visible to its author and users who see the item and have View All Data or Can Approve Feed Post and Comment permission. Some people can delete and edit the item. They include the author and users who see the item and have Can Approve Feed Post and Comment or Modify All Data permission. Some actions are blocked when a feed item is pending review: – Comment – Like and unlike – Bookmark – Share
`Title`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The title of the feed item. When the `Type` is `LinkPost`, the `LinkUrl` is the URL and this field is the link name. The `Title` field can be updated on posts of `Type QuestionPost`.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item. Except for `ContentPost`, `LinkPost`, and `TextPost`, don't create feed items of other types directly from the API. • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence.

Field Name	Details
	• `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in WDC. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `AttachArticleEvent`—generated event when a user attaches an article to a case. • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `CaseCommentPost`—generated event when a user adds a case comment for a case object. • `ChangeStatusPost`—generated event when a user changes the status of a case. • `ChatTranscriptPost`—generated event when Chat transcript is saved to a case.

Field Name	Details
	• EmailMessageEvent—generated event when an email related to a case object is sent or received. • FacebookPost—generated when a Facebook post is created from a case. Deprecated. • MilestoneEvent—generated when a case milestone is completed or reaches violation status. • SocialPost—generated when a social post is created from a case. Note: If you set Type to ContentPost, also specify ContentData and ContentFileName.
Visibility	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Specifies whether this feed item is available to all users or internal users only. This field is available in API version 26.0 and later, if digital experiences is enabled for your org. Visibility can have the following values: • AllUsers—The feed item is available to all users who have permission to see the feed item. • InternalUsers—The feed item is available to internal users only. Note the following exceptions for Visibility: • For record posts, Visibility is set to InternalUsers for all internal users by default. • External users can set Visibility only to AllUsers. • Visibility can be updated on record posts. • The Update property is supported only for feed items posted on records.

Usage

- When a feed item's IsClosed field is set to true, some actions are blocked and others are blocked to most users. This table sets out the actions that are blocked when a feed item is closed.

Action	Availability on a Closed Conversation
Add a comment	Blocked
Answer a question	Blocked
Vote on a poll	Blocked

Action	Availability on a Closed Conversation
Edit a feed item or its comments or answers	Blocked to author; available to admins, moderators, and people with the Close Conversation Threads in Feeds permission Editing is blocked specifically for the feed item title, feed item body, and feed content body fields.
Edit a topic	Available
Delete a feed item or its comments or answers	Blocked to author; available to admins, moderators, and people with the Close Conversation Threads in Feeds permission
Publish a pending review comment (moderation)	Available to admins and moderators
Like or unlike; upvote or downvote	Available
Select or remove a best answer	Blocked to author; available to admins, moderators, and people with the Close Conversation Threads in Feeds permission
Company verify; remove verification	Available only to people with the Verify Answers to Chatter Questions permission
Flag	Available
Share	Available
Bookmark	Available
Mute and unmute	Available
Escalate to case	Available only to people permitted to escalate a feed item to a case

- This Apex example shows how to add a feed item with an attachment to a lead using API version 36.0 and later. First, post a feed item.

```
//create and insert post
FeedItem post = new FeedItem();
post.Body = 'HelloThere';
post.ParentId = 'ID_OF_LEAD_ENTITY';
post.Title = 'FileName';
insert post;
```

Then insert the attachment.

```
//create and associate a content attachment to the post
FeedAttachment feedAttachment = new FeedAttachment();
feedAttachment.FeedEntityId = post.Id;
feedAttachment.RecordId = 'ID_OF_CONTENT_VERSION';
feedAttachment.Title = 'FileName';
feedAttachment.Type = 'CONTENT';
insert feedAttachment;
```

- If you are using API version 23.0 or later and have View All Data permission, you can directly query for a FeedItem. The following example returns the 20 most recent feed items.

```
SELECT ID, CreatedDate, CreatedById, CreatedBy.FirstName, CreatedBy.LastName, ParentId,
 Parent.Name, Body,
 (SELECT ID, FieldName, OldValue, NewValue FROM FeedTrackedChanges ORDER BY ID DESC)
FROM FeedItem
WHERE CreatedDate > LAST_MONTH
ORDER BY CreatedDate DESC
```

- If you are using an earlier API version than version 23.0, query FeedItem objects through a feed (such as AccountFeed or OpportunityFeed). The following example returns all feed items for a given account, ordered by date descending:

```
SELECT Id, Type, FeedItem.Body
FROM AccountFeed
WHERE ParentId = AccountId ORDER BY CreatedDate DESC
```

Note: Provide the `ParentId` for API version 22.0 and earlier.

- A feed item of type `UserStatus` is automatically created when a user adds a post to update the status. You can't explicitly create a feed item of type `UserStatus`.
- The FeedItem object doesn't support aggregate functions in queries.
- If the context user has the Insert System Field Values for Chatter Feeds user permission, the `create` field property is available on `CreatedBy` and `CreatedDate` system fields. During migration, the context user can set these fields to the original post's author and creation date. The fields can't be updated after migration.
- The size limit for an attachment on a feed is 2 GB.
- You can't use the content fields to update or delete the content.
- You can't filter or update the content fields.
- Deleting a feed item via the API also deletes the associated content. Likewise, undeleting a feed item restores associated content.

Note: This object is hard deleted. It isn't sent to the Recycle Bin.

- After uploading to a feed, it is possible for an attachment or document to be deleted, marked private, or hidden by sharing rules. In this case, all content fields in a FeedItem object appear as `null` in a SOQL query.
- You can't explicitly create or delete a FeedTrackedChange record.
- Imagine that you insert a feed item or feed comment of `Type ContentPost` on a User or Group to create a file. Then the `NetworkScope` field value of the feed item is passed to the file.
- If you use an Apex trigger to modify the `Body` of a FeedItem object, all mentions hyperlinks are converted to plain text. The mentioned users don't get email notifications.
- If you insert rich text into the feed item body, make sure that the case of the opening and closing HTML tags matches. For example, `<b>This is bold text</B>` generates an error.
- To check file sharing with Apex triggers, write triggers on ContentDocumentLink instead of FeedItem. For an example, see ContentDocumentLink.
- In API version 36.0 and later, use FeedAttachment to attach one or more content items to a feed item. As a result of support for multiple attachments through FeedAttachment, all fields related to content attachments have been removed. These fields are: `ContentData`, `ContentDescription`, `ContentFileName`, `ContentSize`, and `ContentType`.
- For all API versions of FeedItem, you can't query a FeedItem object using the `System Modstamp` filter.

FeedLike

Indicates that a user has liked a feed item. This object is available in API version 21.0 and later.

FeedLike records represent likes on posts and not likes on comments. Likes on comments can't be queried via the API. A FeedLike is a child object of an associated FeedItem, FeedTrackedChange, or object feed, such as AccountFeed.

Supported Calls

`create()`, `delete()`, `describeSObjects()`

Special Access Rules

If the context user has the Insert System Field Values for Chatter Feeds user permission, the `create` field property is available on `CreatedBy` and `CreatedDate` system fields. During migration, the context user can set these fields to the original post's author and creation date. The fields can't be updated after migration.

Fields

Field Name	Details
`FeedItemId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the feed item that the user liked.
`FeedEntityId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of a feed item or feed comment the user liked. If the user liked a comment, `FeedEntityId` is set to the ID of the comment. If the user liked a feed item, `FeedEntityId` is set to the ID of the feed item. This field is optional. The default value is the ID of the feed item.
`InsertedById`	**Type** reference **Properties** Filter, Group, Sort

Field Name	Details
	Description ID of the user who added this item to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the context user.

Usage

You can't query FeedLike records directly. They can only be queried via the entity feed, such as AccountFeed.

FeedLike records represent likes on posts and not likes on comments. Likes on comments can't be queried via the API.

FeedPollChoice

Shows the choices for a poll posted in the feed. This object is available in API version 29.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

To delete feed items they didn't create, users must have one of these permissions:

- Modify All Data
- Modify All on the parent object, for example on Account for a poll on an AccountFeed
- Moderate Chatter

Note: Users with the Moderate Chatter permission can delete only the feed items and comments they can see.

Only users with this permission can delete items in unlisted groups.

Fields

Field Name	Details
`ChoiceBody`	**Type** textarea **Properties** Group **Description** A choice in the poll.

Field Name	Details
`FeedItemId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the feed item for the poll.
`Position`	**Type** int **Properties** Group, Sort **Description** Shows the position of the poll choice.

Usage

Use this object to query all of the choices associated with a particular poll. To view how people voted on the poll, see the FeedPollVote object.

FeedPollVote

Shows how users voted on a poll posted in the feed. This object is available in API version 29.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ChoiceId`	**Type** reference **Properties** Filter, Group **Description** Indicates which choice a user selected on a poll posted in a feed.
`FeedItemId`	**Type** reference

Field Name	Details
	Properties Filter, Group, Sort **Description** ID of the feed item for the poll.

Usage

Use this object to query how users voted on a particular poll.

FeedPost

FeedPost represents the following types of changes in a record feed, such as AccountFeed: text posts, link posts, and content posts. This object is available in API version 18.0 through 21.0. FeedPost is no longer available in later versions. Starting with API version 21.0, use FeedItem to represent text posts, link posts, and content posts in feeds.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `search()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Modify All" on the object associated with the feed and delete permission on the parent feed
- "Moderate Chatter"

  Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they can see.

- Manage Unlisted Groups

  Only users with this permission can delete items in unlisted groups.

Only users with the Modify All Data permission can delete a feed item of `Type TrackedChange`.

If the context user has the Insert System Field Values for Chatter Feeds user permission, the `create` field property is available on `CreatedBy` and `CreatedDate` system fields. During migration, the context user can set these fields to the original post's author and creation date. The fields can't be updated after migration.

Fields

Field	Details
`Body`	**Type** string

Field	Details
	Properties Create, Filter, Nillable, Sort **Description** The content of the FeedPost. Required when `Type` is `TextPost` or `AdvancedTextPost`. Optional when `Type` is `ContentPost` or `LinkPost`.
`ContentData`	**Type** base64 **Properties** Create, Nillable **Description** This field is required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
`ContentDescription`	**Type** string **Properties** Create, Nillable, Sort **Description** The description of the file specified in `ContentData`.
`ContentFileName`	**Type** string **Properties** Create, Group, Nillable, Sort **Description** This field is required if `Type` is `ContentPost`. The name of the file uploaded to the feed. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.
`ContentSize`	**Type** int **Properties** Group, Nillable, Sort **Description** This field is the size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
`ContentType`	**Type** string **Properties** Group, Nillable, Sort

Field	Details
	Description This field is the MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
FeedItemId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the feed containing the FeedPost.
InsertedById	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user who added this item to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the context user.
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`). This field is a standard system field.
LinkUrl	**Type** url **Properties** Create, Filter, Nillable, Sort **Description** The URL of a `LinkPost`.
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort

Field	Details
	Description ID of the object type to which the FeedPost is related. For example, set this field to a `UserId` to post to someone's profile feed, or an `AccountId` to post to a specific account.
`Title`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** The title of the FeedPost. When the `Type` is `LinkPost`, the `Body` is the URL and the `Title` is the label for the link.
`Type`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The type of FeedPost: • `UserStatus`—automatically generated when a user updates their status • `TrackedChange`—ignore • `TextPost`—a direct text entry on a feed • `LinkPost`—a URL posting on a feed • `ContentPost`—an uploaded file on a feed Note: If you set `Type` to `ContentPost`, you must specify `ContentData` and `ContentFileName`.

Usage

- You can't directly query for a FeedPost. FeedPosts are always associated with a feed item, so you can query for them through the feeds. The following example returns all feed items for a given account, ordered by date descending:

```
SELECT Id, Type, FeedPost.Body
FROM AccountFeed
WHERE ParentId = AccountId ORDER BY CreatedDate DESC
```

- A FeedPost of type `UserStatus` is automatically created when a user adds a post to update the current status. You can't explicitly create a FeedPost of type `UserStatus`.
- The size limit for an attachment on a profile, news, or record feed is 2 GB.
- You can't use the content fields to update or delete the content.
- You can't filter or update the content fields.

- Deleting a FeedPost via the API also deletes the associated content and FeedPost objects. Likewise, undeleting a FeedPost restores associated content and FeedPost objects.

  Note: This object is hard deleted. It isn't sent to the Recycle Bin.

- After uploading to a feed, it is possible for an attachment or document to be deleted, marked private, or hidden by sharing rules. In this case, all content fields in FeedPost appear as `null` in a SOQL query.
- You can't explicitly create or delete a FeedTrackedChange record.

FeedRevision

Holds the revision history of a specific feed item or comment, including a list of attributes that changed for each revision. This object is available in API version 34.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Action`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Holds the type of modification to the underlying feed item or comment attribute. `Action` can have the value `Changed`.
`EditedAttribute`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Identifies the part of the feed item or comment which was modified. A single revision can have many edited attributes.
`FeedEntityId`	**Type** reference **Properties** Filter, Group, Sort **Description** Identifies the modified feed item or comment.

Field Name	Details
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`). This field is a standard system field.
IsValueRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. If you post a rich text feed comment using SOAP API, set `IsRichText` to `true` and escape HTML entities from the body. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<a>` • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only through the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
OriginNetworkId	**Type** reference

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The ID of the Experience Cloud site in which a user modified the feed item or comment. This field is only available, if digital experiences is enabled for your org.
`Revision`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The revision number of the feed item or comment.
`Value`	**Type** textarea **Properties** Nillable **Description** Identifies the value of the `EditedAttribute` field before the update.

Usage

This object tracks the changes made to a feed item or feed comment and stores a list of attributes that changed for each revision.

- To query the FeedRevision object, users need the View All Data permission or supply a WHERE clause on the `FeedEntityId`.

feedSignal

Attach feed signals, like `UpDownVote`, `UserVerified`, and `Verified`, to a feed post or comment. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`

Fields

Field	Details
`FeedEntityId`	**Type** reference

Field	Details
	Properties Create, Filter, Group, Nillable, Sort **Description** The ID of the Feed entity.
`FeedItemId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the feed post or comment. Possible values are: • `FeedItem` • `FeedComment`
`InsertedById`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of user who inserted the signal.
`SignalType`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of signal. Possible values are: • `UpDownVote` • `UserVerified` • `Verified`
`SignalValue`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort **Description** The value of the signal. For example, for `UpDownVote`, the value specifies whether the signal is an upvote or a downvote.

FeedTrackedChange

Represents an individual field change or set of field changes. A FeedTrackedChange is a child object of a record feed, such as AccountFeed. This object is available in API version 18.0 and later.

Supported Calls

`describeSObjects()`

Fields

Field	Details
`CurrencyIsoCode`	**Type** picklist **Properties** Defaulted on create, Group, Restricted picklist, Sort **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO currency code for the field, if `FieldName` is a currency field.
`FeedItemId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the parent feed that tracks the field change.
`FieldName`	**Type** string **Properties** Group, Sort **Description** The name of the field that was changed. Note: This field also tracks other events that are not related to an individual field for a parent feed. These events occur as the parent record advances through its pipeline. For example, a value of `leadConverted` indicates that a lead has been converted to an opportunity. For a full list of values, see Tracking of Special Events.
`NewValue`	**Type** anyType **Properties** Nillable, Sort

Field	Details
	Description The new value of the field that was changed.
`OldCurrencyIsoCode`	**Type** string **Properties** Group, Nillable, Sort **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO currency code for the `OldValue` field, if `FieldName` is a currency field.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The last value of the field before it was changed.

Usage

A user can subscribe to a record or to another user. Changes to the record and updates from the users are displayed in the Chatter feed on the user's home page, which is a useful way to stay up-to-date with other users and with changes made to records in Salesforce. Feeds are available in API version 18.0 and later.

If you move a custom field to the Recycle Bin, all FeedTrackedChange records that track historical changes to the custom field are automatically deleted and are not restored if the custom-field is undeleted.

The following sections outline the difference between standard feeds and custom feeds.

Standard Feeds

A standard feed is a record feed, such as AccountFeed. FeedTrackedChange records for standard feeds can only be queried via the parent feed object.

Note the following when working with standard feed items:

- Feed items for standard feeds are read only in the API.
- A FeedTrackedChange record is visible when you have read access on the record feed, and when the field is visible in the field-level security settings.

Custom Feeds

If you want more control over the information provided in a record feed, such as AccountFeed, you can create a custom feed. A custom feed can replace or augment an existing record feed. For example, you might want to:

- Disable the standard account record feed and use an Apex trigger to generate FeedTrackedChange records for the events that you want to track in the feed instead.
- Augment the standard contact record feed by writing an API client that inserts feed items for events that are not tracked in the standard feed.

Tracking of Special Events

The `FieldName` field also tracks other events that are not related to an individual field for a parent feed. These events occur as the parent record advances through its pipeline. For example, a value of `leadConverted` indicates that a lead has been converted to an opportunity.

Valid values for the `FieldName` field for multiple objects:

- `created`
- `ownerAccepted`
- `ownerAssignment`

Additional valid values for the `FieldName` field for individual objects:

Account

- `accountCreatedFromLead`
- `accountMerged`
- `accountUpdatedByLead`
- `personAccountUpdatedByLead`

Case

- `closed`
- `ownerEscalated`

Contact

- `contactCreatedFromLead`
- `contactMerged`
- `contactUpdatedByLead`

Contract

- `contractActivation`
- `contractApproval`
- `contractConversion`
- `contractExpiration`
- `contractTermination`

Lead

- `leadConverted`
- `leadMerged`

Opportunity

- `opportunityCreatedFromLead`

SEE ALSO:

Custom Object__Feed

FieldHistoryArchive

Represents field history values for all objects that retain field history. `FieldHistoryArchive` is a big object, available only to users with the "Retain Field History" permission. This object is available in API version 29.0 and later.

Each instance of the `FieldHistoryArchive` object represents a single change in the value of a field. `FieldHistoryArchive` stores history for both standard and custom fields.

The `Field` field returns the name of the field unless the parent field or object is deleted, in which case it returns the field ID. You can use the ID to retrieve the old field and object name from the `FieldNameAfterArchival` and `ParentNameAfterArchival` fields, respectively.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field Name	Details
`ArchiveFieldName`	**Type** string **Properties** Nillable **Description** The name of the field at the time the data was archived. If the field name changed, the name is sometimes not the same for all records related to a single field.
`ArchiveParentName`	**Type** string **Properties** Nillable **Description** The name of the parent object at the time the data was archived. If the object name changed, the name is sometimes not the same for all records related to a single field.
`ArchiveParentType`	**Type** string

Field Name	Details
	Properties Nillable **Description** The type of the field at the time the data was archived. If the field type changed, the type is sometimes not the same for all records related to a single field.
`ArchiveTimestamp`	**Type** dateTime **Properties** Nillable **Description** The date and time at which the data was archived.
`CreatedById`	**Type** reference **Properties** Nillable **Description** The user ID of the user who created the original record.
`CreatedDate`	**Type** dateTime **Properties** Nillable, Sort **Description** The date and time at which the original record was created.
`Field`	**Type** picklist **Properties** Restricted picklist **Description** The name of the field that was changed. If the field is deleted from the parent object, the `Field` field contains the field ID instead.
`FieldHistoryType`	**Type** picklist **Properties** Filter, Nillable, Restricted picklist, Sort **Description** The name of the object that contains the field history. Possible values are:

Field Name	Details
	• Account • Article • Asset • Campaign • Case • Contact • Contract • ContractLineItem • Crisis • Employee • EmployeeCrisisAssessment • Entitlement • Individual • InternalOrganizationUnit • Knowledge • Lead • Opportunity • Order • OrderItem • Pricebook2 • PricebookEntry • Product2 • ServiceAppointment • ServiceContract • Solution • WorkOrder • WorkOrderLineItem
HistoryId	**Type** reference **Properties** Filter, Sort **Description** The ID of the relevant history object (for example, AccountHistory). This field is available in versions 42.0 and later.
Id	**Type** ID

Field Name	Details
	Properties Defaulted on create, Filter, idLookup **Description** The ID of the archived record. It's useful to have a field's ID for fields that you've deleted. (Field names aren't retained in history when you delete fields from Salesforce.)
`NewValue`	**Type** anyType **Properties** Nillable **Description** The new value of the modified field.
`OldValue`	**Type** anyType **Properties** Nillable **Description** The previous value of the modified field.
`ParentId`	**Type** reference **Properties** Filter, Sort **Description** The ID of the object that contains the field (the parent object).

Usage

When sorting fields, order them as follows:

1. `FieldHistoryType ASC`
2. `ParentID ASC`
3. `CreatedDate DESC`

SEE ALSO:

*Developer Guide:*Big Objects Implementation Guide

FieldPermissions

Represents the enabled field permissions for the parent PermissionSet. This object is available in API version 24.0 and later.

To grant a user access to a field, associate a FieldPermissions record with a PermissionSet that's assigned to a user. FieldPermissions records are only supported in PermissionSet, not in Profile.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

In API version 49.0 and later, only users with the View Setup and Configuration permission can access this object.

Fields

In API version 50.0 and later, for lookup field inserts and queries, you can leave off the Id in the field name *or* include it. The rows returned always use the API name. For example:

```
Select SobjectType, Field From FieldPermissions where Field='Contact.Account'
```

and

```
Select SobjectType, Field From FieldPermissions where Field='Contact.AccountId'
```

both return

```
Contact, Contact.AccountId
```

Field Name	Details
`Field`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The field's API name. This name must be prefixed with the `SobjectType`. For example, `Merchandise__c.Description__c`
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The `Id` of the field's parent PermissionSet.

Field Name	Details
`PermissionsEdit`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** If `true`, users assigned to the parent PermissionSet can edit this field. Requires `PermissionsRead` for the same field to be `true`.
`PermissionsRead`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** If `true`, users assigned to the parent PermissionSet can view this field. A FieldPermissions record must have at minimum `PermissionsRead` set to `true`, or it will be deleted.
`SobjectType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The object's API name. For example, `Merchandise__c`.

Usage

FieldPermissions work similarly to ObjectPermissions. However, FieldPermissions includes a `Field` attribute to return the name of the field.

For example, the following query returns all FieldPermissions records that have at least the "Read" permission. The results include the field, object, and permission set names.

```
SELECT SobjectType, Field, PermissionsRead, Parent.Name
FROM FieldPermissions
WHERE PermissionsRead = True
```

Include the field's parent object when querying FieldPermissions. For example, to find all rows that match the Account object's `Type` field, create the following query:

```
SELECT Id, SobjectType, Field
FROM FieldPermissions
WHERE Field = 'Account.Type' AND SobjectType = 'Account'
```

To find which permission sets are backed by profiles with the Account object, you can use a query like the following example:

```
SELECT Id, ParentId, SobjectType, Field, PermissionsEdit, PermissionsRead, Parent.Name
FROM FieldPermissions
```

```
WHERE SobjectType = 'Account' and Parent.IsOwnedByProfile = true
ORDER BY SObjectType, Field
```

Both `SobjectType` and `Field` must be included in the `SELECT` line of the query. Provide the full API name of the field in the form of `SobjectType.Field` when querying for a field.

Note: When using the FieldPermission object to download records, depending on the SOQL query you use, you might not receive all expected records. Results can also appear incomplete. However, all records do download; fields that don't support field security and rows for entities not visible to the org are hidden.

Special Properties for Field Permissions

The auto-number and formula fields have special rules for how field permissions work. Both have FieldPermissions records, but inserting and updating is limited to `PermissionsRead`. `PermissionsEdit` isn't allowed for either field type, since these fields must be read-only for users.

The following field types don't return a FieldPermissions record because they are assumed to always be readable.

- `Id`
- `CreatedById`
- `CreatedDate`
- `IsDeleted`
- `LastModifiedById`
- `LastModifiedDate`
- `SystemModStamp`

The following field types don't return a FieldPermissions record because they are assumed to always be readable and writable.

- `OwnerId`
- Master-detail custom (relationship) fields
- Universally required custom fields

As a result, the following query returns no records, even though users do have some access to some of the fields.

```
SELECT Field, SobjectType, PermissionsRead
FROM FieldPermissions
WHERE Field='Id'
```

To determine if a field can return a FieldPermissions record, you can call a `describeSObject()` on the field. For example, `describeSObject('Merchandise__c')`, returns all the properties of the Merchandise custom object, including field properties. If you use a field whose `permissionable` property is `false` (like the field types listed in this section), you can't query, insert, update, or delete field permissions records, because they don't exist.

Working with Custom Activity Fields

While tasks and events are considered separate objects, they share a common set of activity custom fields. As a result, when a custom task field is created, a custom event field is also created, and vice versa. You can display the custom field on the event layout, task layout, or both event and task layouts.

Although custom activity fields are shared between tasks and events, you see separate FieldPermissions records for the task and event. However, changes made to one field permission record are automatically made to the other. For example, if you create a custom activity field, assign field permissions to it in a permission set, and run the following query, the query returns two records with the same permission value.

```
SELECT Field, Id, ParentId, PermissionsEdit, PermissionsRead, SobjectType
FROM FieldPermissions
WHERE SobjectType = 'event' OR SobjectType ='task'
```

If you then update one of the records with another set of field permission values and run the query, the same permission values for both records are returned.

Nesting Field Permissions

You can nest FieldPermissions in a PermissionSet query. For example, the following returns any permission sets where "Edit Read Only Fields" is `true`. Also, the result set includes both the "Read" and "Edit" field permission on the Merchandise object. Get similar results by nesting the SOQL with a field permission query using the relationship name for field permissions: `FieldPerms`.

```
SELECT PermissionsEditReadonlyFields,
(SELECT SobjectType, Field, PermissionsRead, PermissionsEdit
FROM FieldPerms
WHERE SobjectType = 'Merchandise__c')
FROM PermissionSet
WHERE PermissionsEditReadonlyFields = true
```

As a result, it's possible to traverse the relationship between the PermissionSet and any child-related objects (in this case, FieldPermissions). You can do this from the PermissionSet object by using the child relationship (`ObjectPerms`, `FieldPerms`, and so on) or from the child object by referencing the PermissionSet with `Parent.`***`permission_set_attribute`***.

It's important to consider when to use a conditional `WHERE` statement to restrict the result set. To query based on an attribute on the permission set object, nest the SOQL with the child relationship. However, to query based on an attribute on the child object, you must reference the permission set parent attribute in your query.

The following two queries return the same columns with different results, based on whether you use the child relationship or parent notation.

```
SELECT PermissionsEditReadonlyFields,
(SELECT SobjectType, Field, PermissionsRead, PermissionsEdit
FROM FieldPerms
WHERE SobjectType = 'Merchandise__c')
FROM PermissionSet
WHERE PermissionsEditReadonlyFields = true
```

Versus:

```
SELECT SobjectType, Field, PermissionsRead, PermissionsEdit, Parent.Name,
   Parent.PermissionsEditReadonlyFields
FROM FieldPermissions
WHERE SObjectType='Merchandise__c'
```

SEE ALSO:

PermissionSet
ObjectPermissions

FieldSecurityClassification

Represents a field's data sensitivity value selected from the SecurityClassification picklist. This object is available in API version 46.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

To view this object, you need the Customize Application or Modify Data Classification permission.

Fields

Field Name	Details
`ApiName`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The API name of the data sensitivity picklist value. Default values: • Public • Internal • Confidential • Restricted • MissionCritical
`Description`	**Type** textarea **Properties** Filter, Group, Nillable, Sort **Description** The description of the data sensitivity picklist value.
`IsHighRiskLevel`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates that fields with this picklist value contain data highly sensitive to your company.

Field Name	Details
`MasterLabel`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The data sensitivity picklist value. Default values: • Public • Internal • Confidential • Restricted • MissionCritical
`SortOrder`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The value's position in the picklist.

Usage

Use this object to return information about data sensitivity values in the SecurityClassification picklist. This object is read-only, but you can update the SecurityClassification picklist using the StandardValueSet Metadata API type.

FieldServiceMobileSettings

Represents a configuration of settings that control the Field Service iOS and Android mobile app experience. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
BgGeoLocationAccuracy	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Controls the accuracy of geolocation tracking of services resources while the app is running in the background. Lowering accuracy reduces battery consumption for mobile devices. Available in API version 41.0 and later. Picklist options: 1. Medium: Accurate to within about 100 meters. The API name for this value is `Medium`. 2. Coarse: Accurate to within about 1 kilometer. The API name for this value is `Coarse`. 3. Very Coarse: Accurate to within about 3 kilometers. The API name for this value is `VeryCoarse`.
BgGeoLocationMinUpdateFreqMins	**Type** int **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Controls the frequency of geolocation poling of services resources while the app is running in the background. Less frequent poling decreases battery consumption for mobile devices. The label in the UI is Minimum Update Frequency of Geo Location in Minutes (Background). Available in API version 41.0 and later.
BrandInvertedColor	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The color of toasts and the contrast color of the floating action button.
ContrastInvertedColor	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The color of secondary backgrounds in the UI.

Field Name	Details
ContrastPrimaryColor	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The color of primary text.
ContrastQuaternaryColor	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The color of secondary lines that delineate different areas of the UI.
ContrastQuinaryColor	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The color of primary backgrounds in the UI.
ContrastSecondaryColor	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The color of secondary text.
ContrastTertiaryColor	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The color of the icons on the settings screen and of primary lines that delineate different areas of the UI.
DefaultListViewDeveloperName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description The API name of the default service appointment list view on the schedule screen.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The API name of the set of field service mobile settings.
`FeedbackPrimaryColor`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The color of error messages.
`FeedbackSecondaryColor`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The color of success messages.
`FeedbackSelectedColor`	**Type** string **Properties** Create, Defaulted on create, Group, Sort, Update **Description** The color indicating the user's current selection.
`FutureDaysInDatePicker`	**Type** int **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The number of days into the future that a user can select from the date picker on the schedule screen.
`GeoLocationAccuracy`	**Type** picklist

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** The accuracy of service resource geolocation tracking. Lowering accuracy reduces battery consumption for mobile devices. Picklist values: • Fine: Accurate to within 10 meters. The API name for this value is `Fine`. • Medium: Accurate to within 100 meters. The API name for this value is `Medium`. • Coarse: Accurate to within 1 kilometer. The API name for this value is `Coarse`.
GeoLocationMinUpdateFreqMins	**Type** int **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The minimum number of minutes between attempts to poll geolocation.
IsAssignmentNotification	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Controls whether service appointment notifications are sent when the service resource is assigned the appointment (`true`) or not (`false`). This field is available in API version 46.0 and later.
IsDefault	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates that the set of field service mobile settings is the default set that is automatically assigned to users. You can't make a different settings record the default, but you can modify the default settings record. Available in API version 41.0 and later.
IsDispatchNotification	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field Name	Details
	Description Controls whether service appointment notifications are sent when the service resource is dispatched for the appointment (`true`) or not (`false`). This field is available in API version 46.0 and later.
`IsSendLocationHistory`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Controls whether geolocation tracking of services resources is enabled (`true`) or not (`false`).
`IsShowEditFullRecord`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Controls whether users can edit records with the field service mobile app (`true`) or not (`false`).
`IsTimeSheetEnabled`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Controls whether users can access time sheets on their mobile devices (`true`) or not (`false`) (Beta).
`IsTimeZoneEnabled`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Controls whether the time zone of timesheet entries on the mobile app is recorded (`true`) or not (`false`). The current time zone is recorded in the `LocationTimeZone` field of the TimeSheetEntry object. Available in API version 50.0 and later.
`IsUseSalesforceMobileActions`	**Type** boolean

Field Name	Details
	Properties Defaulted on create, Filter, Group, Sort **Description** Reserved for future use.
Language	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The localization preference for a user.
MasterLabel	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The label in the UI for the set of field service mobile settings. Available in API version 41.0 and later.
MetadataCacheTimeDays	**Type** int **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The number of days that org metadata, such as layouts, is kept in the app's local cache of memory.
NavbarBackgroundColor	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The color of the top bar in the app.
NavbarInvertedColor	**Type** string **Properties** Create, Defaulted on create, Group, Sort, Update **Description** The secondary color of the tap bar in the app.

Field Name	Details
PastDaysInDatePicker	**Type** int **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The number of days into the past that a user can select from the date picker on the schedule screen.
PrimaryBrandColor	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The main branding color used throughout the UI.
QuickStatusChangeFlowName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The name of an existing Field Service flow with a Quick Status Change action to change the work order or service appointment status or both. This applies to flows invoked on the mobile app only. This field is available in API version 51.0 and later.
RecordDataCacheTimeMins	**Type** int **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The number of minutes that record data is kept in the app's local cache of memory.
SecondaryBrandColor	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The color of action buttons.
TimeIntervalSetupMins	**Type** picklist

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Controls the spacing of picklist options for time values such as when creating resource absences.
`UpdateScheduleTimeMins`	**Type** int **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The minimum number of minutes between attempts to update a user's schedule. Note: The user's schedule might not refresh on this cadence if the user's device isn't connected to a network or doesn't have adequate battery life.

Usage

Field Service Mobile settings allow you to create sets of settings to apply to different field service mobile users. The settings apply to both the Android and iOS versions of the app.

For example, suppose you want to accommodate workers that are color blind, or who work in dark or bright conditions. You can choose different branding options for different workers to suit their needs, and assign them to their profiles.

FiscalYearSettings

Settings to define a custom or standard fiscal year for your organization. This object has a parent-child relationship with the Period object.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

As of Spring '20 and later, only partner users and standard users can access this object.

Fields

Field	Details
`Description`	**Type** string

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** Description of the setting.
`EndDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** End date of the fiscal year.
`IsStandardYear`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the fiscal year is a standard calendar year (`true`) or a custom fiscal year (`false`).
`Name`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** A name for the fiscal year. Limit: 80 characters.
`PeriodId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the associated fiscal period.
`PeriodLabelScheme`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The numbering scheme used for fiscal periods.

Field	Details
PeriodPrefix	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** The prefix of fiscal periods. For example, if `p` is the prefix, then the first period is “P1.”
QuarterLabelScheme	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The numbering scheme used for fiscal quarters.
QuarterPrefix	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** The prefix of fiscal quarters. For example, if “Q” is the prefix, then the fourth quarter would be “Q4.”
StartDate	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Start date of the fiscal year.
WeekLabelScheme	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The numbering scheme used for weeks.
WeekStartDay	**Type** int **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The name of the day that starts the week, for example `Monday` or `Sunday`
`YearType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Indicates one of two types of fiscal years, Standard or Custom. Standard denotes the standard Gregorian calendar, while Custom means a fiscal year with a custom structure.

SEE ALSO:

Period

Object Basics

FlexQueueItem

Represents an asynchronous Apex job in the Apex flex queue. Provides information about the job type and flex queue position of the AsyncApexJob. This object is available in API version 36.0 and later.

Supported Calls

`describeSObjects()`, `query()`

Special Access Rules

The `enableAsyncRequiresViewSetup` field on the ApexSettings metadata type controls the activation of the critical update "Require View Setup permission to enqueue async Apex Jobs". In API version 49.0 and later, when the field is set to `true`, users must have the View Setup and Configuration permission to access this object.

Fields

Field Name	Description
`AsyncApexJobId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of an AsyncApexJob that's waiting in the flex queue.

Field Name	Description
FlexQueueItemId	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The primary key for this FlexQueueItem.
JobPosition	**Type** int **Properties** Filter, Group, Sort **Description** The position in the flex queue of the waiting job. The highest-priority job in the queue is at position 0.
JobType	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of the job. Valid values are: • `ApexToken` • `BatchApex` • `BatchApexWorker` • `Future` • `Queueable` • `ScheduledApex` • `SharingRecalculation` • `TestRequest` • `TestWorker` Currently, queries are supported only on `BatchApex` jobs.

Usage

To find the position of an AsyncApexJob in the flex queue, query `JobPosition`. For example:

```
SELECT JobPosition FROM FlexQueueItem WHERE JobType = 'BatchApex' AND AsyncApexJobId =
'707xx000000DABC'
```

To find the job at a given position, query `AsyncApexJobId`. For example:

```
SELECT AsyncApexJobId FROM FlexQueueItem WHERE JobType = 'BatchApex' AND JobPosition = '2'
```

To find all batch jobs in the flex queue, query `JobType`. To get other information about the jobs, include AsyncApexJob in your query. For example:

```
SELECT JobType, JobPosition, AsyncApexJob.ApexClass.Name, AsyncApexJob.CreatedDate,
    AsyncApexJob.CreatedBy FROM FlexQueueItem WHERE JobType='BatchApex' AND
    AsyncApexJob.ApexClass.Name LIKE '%'BatchAJob'%' ORDER BY JobPosition DESC
```

FlowDefinitionView

Represents the description of a flow definition. This object is available in API version 46.0 and later.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field	Details
`ActiveVersionId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ID of the active flow version.
`ApiName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The API name of the flow definition.
`Builder`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the tool that created this flow. Possible values are: • Cloud Flow Designer • Flow Builder

Field	Details
	• Swing Designer This field is available in API version 47.0 and later.
`Description`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Flow definition information, specified by the org's admin.
`DurableId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ID of the flow definition.
`InstalledPackageName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the installed package that includes this flow definition. This field is available in API version 47.0 and later.
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the latest version of the flow definition is the active flow version. This field is available in API version 47.0 and later.
`IsOutOfDate`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the active flow version is the latest version of the flow definition. This field is available in API version 47.0 and later.

Field	Details
IsSwingFlow	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the flow is built with Desktop Flow Designer. This field is available in API version 49.0 and later.
IsTemplate	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the process or flow is a template. When installed from managed packages, processes and flows can’t be viewed or cloned by subscribers because of intellectual property (IP) protection. But when those processes and flows are templates, subscribers can open them in a builder, clone them, and customize the clones. This field is available in API version 47.0 and later.
Label	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The label of the flow definition.
LastModifiedBy	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of the user who last updated this flow definition. This field is available in API version 47.0 and later.
LatestVersionId	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ID of the latest flow version, regardless of the flow’s status.

Field	Details
`ManageableState`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Indicates the manageable state of the flow that is contained in a package. Possible values are: • `beta` • `deleted` • `deprecated` • `deprecatedEditable` • `installed` • `installedEditable` • `released` • `unmanaged` This field is available in API version 47.0 and later.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with the flow definition.
`ProcessType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of the flow. Valid values are: • `Appointments`—A flow for Lightning Scheduler. This value is available in API version 44.0 and later. • `AutoLaunchedFlow`—A flow that doesn't require user interaction. • `CheckoutFlow`—A flow used in Lightning B2B Commerce to create a checkout in a store. This value is available in API version 48.0 and later. • `ContactRequestFlow`—A flow that lets customers request that customer support get back to them. This flow is used to create contact request records. This value is available in API version 45.0 and later. • `CustomerLifecycle`—A Salesforce Surveys flow that lets you associate survey questions with different stages in customer lifecycles. This value is available

Field	Details
	in API version 49.0 and later and only when the Customer Lifecycle Designer license is enabled. • `CustomEvent`—A process that is invoked when it receives a platform event message. In the UI, it's an event process. This value is available in API version 41.0 and later. • `FieldServiceMobile`—A flow for the Field Service mobile app. This value is available in API version 39.0 and later. • `FieldServiceWeb`—A flow for embedded Appointment Booking. Its UI label is Field Service Embedded Flow. This value is available in API version 41.0 and later. • `Flow`—A flow that requires user interaction because it contains one or more screens or local actions, choices, or dynamic choices. In the UI and Salesforce Help, it's a screen flow. Screen flows can be launched from the UI, such as with a flow action, Lightning page, or web tab. • `FSCLending`— A flow for Financial Services Cloud Mortgage. This value is available in API version 46.0 and later. • `FSCLending`—A flow for login. This value is available in API version 51.0 and later. • `InvocableProcess`—A process that can be invoked by another process or the Invocable Actions resource in REST API. This value is available in API version 38.0 and later. • `Survey`—A flow for Salesforce Surveys. From the UI, this type of flow is created in Survey Builder. This value is available in API version 42.0 and later. • `SurveyEnrich`—A Salesforce Surveys flow that uses the Survey Data Mapper. From the UI, this type of flow is created in the Survey Builder and requires an associated survey flow type. This value is available in API version 49.0 or later and only when the Customer Lifecycle Designer license is enabled. • `Workflow`—A process that is invoked when a record is created or edited. In the UI and Salesforce Help, it's a record change process. These values are reserved for future use. • `ActionCadenceFlow` • `ActionPlan` • `AppProcess` • `CartAsyncFlow` • `DigitalForm` • `Journey` • `JourneyBuilderIntegration` • `LoginFlow` • `ManagedContentFlow` • `OrchestrationFlow` • `RecommendationStrategy`

Field	Details
	• `SalesEntryExperienceFlow` • `TransactionSecurityFlow` • `UserProvisioningFlow` Note: This value has significant impact on validation when saving the flow and on the flow's runtime behavior. Don't change this value unless you understand the flow properties of the specified type. Across flow versions, you can change the type only from `Flow` to `AutoLaunchedFlow` or vice versa. Before you change the flow type, make sure that the flow contains only elements, resources, and functionality that the new flow type supports.
`TriggerType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies what causes the flow to run. If you exclude this field, the flow has no trigger and starts only when a user or app launches the flow. Valid value is: • `PlatformEvent`—The flow starts when a platform event message is received. This value is available in API version 49.0 and later. • `RecordAfterSave`—The flow starts after a record is saved. This value is available in API version 49.0 and later. • `RecordBeforeSave`—Creating and/or updating a record triggers an autolaunched flow to make additional updates to that record before it's saved to the database. This value is available in API version 48.0 and later. • `Scheduled`—The flow starts at the scheduled time. This value is available in API version 47.0 and later. Available only when `processType` is `AutoLaunchedFlow`. This field is available in API version 47.0 and later.

Usage

Use this object to query information about flow definitions.

FlowInterview

Represents a flow interview. A *flow interview* is a running instance of a flow.

Supported Calls

`delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

To delete a flow interview, you must have the “Manage Flow” user permission. All other calls require the “Run Flows” user permission or the `Flow User` field enabled on the user detail page. If **Override default behavior and restrict access to enabled profiles or permission sets** is selected for an individual flow, access to that specific flow and its interviews is given to users by profile or permission set.

Fields

Field Name	Details
`CurrentElement`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The flow element at which the interview is currently paused.
`Guid`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Globally unique identifier for the interview.
`InterviewLabel`	**Type** string **Properties** Filter, Nillable, Sort **Description** Label for the interview. This label helps users and administrators differentiate interviews from the same flow. In the user interface, this label appears in the Paused Flow Interviews component on the user’s Home tab and in the list of paused flow interviews in Setup.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name for the interview.
`OwnerId`	**Type** reference

Field Name	Details
	Properties Filter, Group, Sort **Description** The ID of the user who owns the interview. Only this user or an admin can resume the interview.
`PauseLabel`	**Type** string **Properties** Filter, Nillable, Sort **Description** Information about why the interview was paused. This string is entered by the user who paused the flow interview. The label is **Why Paused**.
`WasPausedFromScreen`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Whether or not the flow interview was paused by a user from a flow Screen element. This field is available in API version 46.0 and later.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

FlowInterviewOwnerSharingRule
Sharing rules are available for the object.

FlowInterviewShare
Sharing is available for the object.

FlowInterviewOwnerSharingRule

Represents the rules for sharing a FlowInterview with users other than the owner. This object is available in API version 33.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
AccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of sharing being allowed. The possible values are: • Read • Edit—In API version 42.0 and later, when **Let users resume shared flow interviews** is enabled for your org, users can resume all flow interviews that they have edit access to.
Description	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters.
DeveloperName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. Note: When creating large sets of data, always specify a unique DeveloperName for each record. If no DeveloperName is specified, performance may slow while Salesforce generates one for each record.
GroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group.

Field	Details
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the target user or group that's given access.

Usage

Use this object to manage the sharing rules for FlowInterview records. General sharing uses this object.

In API version 42.0 and later, when **Let users resume shared flow interviews** is enabled for your org, users can resume all flow interviews that they have edit access to. When that setting is disabled, only the owner or a flow admin can resume a flow interview. To disable this setting, go to your org's Process Automation Settings in Setup.

FlowInterviewShare

Represents a sharing entry on a FlowInterview. This object is available in API version 33.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update

Field	Details
	Description Level of access that the User or Group has to the FlowInterview. The possible values are: • `Read` • `Edit`—In API version 42.0 and later, when **Let users resume shared flow interviews** is enabled for your org, users can resume all flow interviews that they have edit access to. • `All`—This value is not valid for creating or deleting records.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the FlowInterview associated with this sharing entry.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can only write to this field when its value is either omitted or set to `Manual` (default). Valid values include: • `Manual`—The User or Group has access because a user with “All” access manually shared the FlowInterview with them. • `Owner`—The User is the owner of the FlowInterview. • `Rule`—The User or Group has access via a FlowInterview sharing rule. • `GuestRule`—The User or Group has access via a FlowInterview guest user sharing rule.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the User or Group that has been given access to the FlowInterview. This field can't be updated.

Usage

This object lets you determine which users and groups can view and edit flow interviews that are owned by other users.

In API version 42.0 and later, when **Let users resume shared flow interviews** is enabled for your org, users can resume all flow interviews that they have edit access to. When that setting is disabled, only the owner or a flow admin can resume a flow interview. To disable this setting, go to your org's Process Automation Settings in Setup.

FlowRecordRelation

Represents a relationship between a record and a flow interview. When a flow interview is paused, Salesforce uses the $Flow.CurrentRecord global variable in the flow to associate the interview with a record. Available in API version 42.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The auto-generated ID of this relation.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The flow interview that the record is related to.
`RelatedRecordId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The record that the flow interview is related to. Make sure that this field contains only one ID, and that the ID is for a valid object. Custom objects and most standard objects are supported. To confirm whether an object is supported, see the Reference To property for this field in Workbench.

FlowStageRelation

Represents a relationship between a paused flow interview and its stages. When a flow interview is paused, Salesforce creates a FlowStageRelation record for each stage that's set to the `$Flow.CurrentStage` or `$Flow.ActiveStages` global variable. Available in API version 43.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`

Fields

Field	Details
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The auto-generated ID of this relation.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** The flow interview that the record is related to.
`StageLabel`	**Type** string **Properties** Filter, Nillable, Sort **Description** Label for the stage. If the stage is translated, the label respects the language of the user who is querying the label.
`StageOrder`	**Type** int **Properties** Filter, Group, Sort **Description** The order of this stage when the flow interview was paused. This order may differ from the order in the stage definition.

Field	Details
	• If the type is Active, the order corresponds to the order of the stage in `$Flow.ActiveStages`. • If the type is Current and corresponds to an active stage, the order matches the order of the active stage. • If the type is Current and doesn't correspond to an active stage, the order is 0.
`StageType`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Type of stage. The valid values are: • Current: Identifies that the stage is set to `$Flow.CurrentStage`. • Active: Identifies that the stage is set to `$Flow.ActiveStages`.

Usage

You can use the FlowStageRelation records to represent the paused interview and its active and current stages visually.

For example, an Online Purchasing flow interview starts with several stages in $Flow.ActiveStages. If the interview is paused, Salesforce creates a FlowStageRelation record for each stage in `$Flow.ActiveStages` or `$Flow.CurrentStage`.

StageLabel	StageType	StageOrder
Review Cart	Active	0
Shipping Details	Active	1
Billing Details	Active	2
Payment Details	Active	3
Order Confirmation	Active	4
Shipping Details	Current	1

FlowVariableView

Represents a variable within the flow version. This object is available in API version 46.0 and later.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field	Details
`ApiName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The API name of the flow variable.
`DataType`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The data type of the flow variable. Valid values are: • `Apex`—This value is available in API version 46.0 and later. • `Boolean` • `Currency` • `Date` • `DateTime`—This value is available in API version 30.0 and later. • `Number` • `Multipicklist`—This value is available in API version 34.0 and later. • `Picklist`—This value is available in API version 34.0 and later. • `String` • `sObject`
`Description`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Flow variable information, specified by the org's admin.
`DurableId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The Id of the flow variable.

Field	Details
`FlowVersionViewId`	**Type** string **Properties** Filter, Nillable, Sort **Description** The Id of the flow version.
`IsCollection`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether or not the flow variable is a collection of values.
`IsInput`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicated whether or not the flow variable is available for input.
`IsOutput`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether or not the flow variable is available for output.
`ObjectType`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** If the data type is sObject, this field indicates which object.

Usage

Use this object to query information about flow variables. A query must be filtered by `FlowVersionViewId` to get results. Only variables with IsInput or IsOutput marked as true are visible.

FlowVersionView

Represents the version of a flow definition. This object is available in API version 46.0 and later.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field	Details
`ApiVersion`	**Type** double **Properties** Filter, Nillable, Sort **Description** The API version for the flow definition. Every flow version has an API version specified at creation. This field is available in API version 50.0 and later.
`ApiVersionRuntime`	**Type** double **Properties** Filter, Nillable, Sort **Description** The API version for running the flow. This value determines which versioned run-time behavior improvements are adopted by the flow version. If not specified when the flow or flow version is created, the latest available API version is used as the API version for running the flow. When an existing flow is saved as a new flow or flow version, the existing flow's run-time API version is used in the new flow or flow version. This field is available in API version 50.0 and later.
`Description`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Flow version information, specified by the org's admin.
`DurableId`	**Type** string

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** The ID of the flow version.
FlowDefinitionViewId	**Type** string **Properties** Filter, Nillable, Sort **Description** The ID of the flow definition.
IsTemplate	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the process or flow is a template. When installed from managed packages, processes and flows can't be viewed or cloned by subscribers because of intellectual property (IP) protection. But when those processes and flows are templates, subscribers can open them in a builder, clone them, and customize the clones. Available in API version 46.0 and later. Default: false
Label	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The label of the flow version.
ProcessType	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of the flow. Valid values are: • `Appointments`—A flow for Lightning Scheduler. This value is available in API version 44.0 and later. • `AutoLaunchedFlow`—A flow that doesn't require user interaction. • `CheckoutFlow`—A flow used in Lightning B2B Commerce to create a checkout in a store. This value is available in API version 48.0 and later.

Field	Details
	• `ContactRequestFlow`—A flow that lets customers request that customer support get back to them. This flow is used to create contact request records. This value is available in API version 45.0 and later. • `CustomerLifecycle`—A Salesforce Surveys flow that lets you associate survey questions with different stages in customer lifecycles. This value is available in API version 49.0 and later and only when the Customer Lifecycle Designer license is enabled. • `CustomEvent`—A process that is invoked when it receives a platform event message. In the UI, it's an event process. This value is available in API version 41.0 and later. • `FieldServiceMobile`—A flow for the Field Service mobile app. This value is available in API version 39.0 and later. • `FieldServiceWeb`—A flow for embedded Appointment Booking. Its UI label is Field Service Embedded Flow. This value is available in API version 41.0 and later. • `Flow`—A flow that requires user interaction because it contains one or more screens or local actions, choices, or dynamic choices. In the UI and Salesforce Help, it's a screen flow. Screen flows can be launched from the UI, such as with a flow action, Lightning page, or web tab. • `FSCLending`— A flow for Financial Services Cloud Mortgage. This value is available in API version 46.0 and later. • `FSCLending`—A flow for login. This value is available in API version 51.0 and later. • `InvocableProcess`—A process that can be invoked by another process or the Invocable Actions resource in REST API. This value is available in API version 38.0 and later. • `Survey`—A flow for Salesforce Surveys. From the UI, this type of flow is created in Survey Builder. This value is available in API version 42.0 and later. • `SurveyEnrich`—A Salesforce Surveys flow that uses the Survey Data Mapper. From the UI, this type of flow is created in the Survey Builder and requires an associated survey flow type. This value is available in API version 49.0 or later and only when the Customer Lifecycle Designer license is enabled. • `Workflow`—A process that is invoked when a record is created or edited. In the UI and Salesforce Help, it's a record change process. These values are reserved for future use. • `ActionCadenceFlow` • `ActionPlan` • `AppProcess` • `CartAsyncFlow` • `DigitalForm` • `Journey` • `JourneyBuilderIntegration`

Field	Details
	• `LoginFlow` • `ManagedContentFlow` • `OrchestrationFlow` • `RecommendationStrategy` • `SalesEntryExperienceFlow` • `TransactionSecurityFlow` • `UserProvisioningFlow` Note: This value has significant impact on validation when saving the flow and on the flow's runtime behavior. Don't change this value unless you understand the flow properties of the specified type. Across flow versions, you can change the type only from `Flow` to `AutoLaunchedFlow` or vice versa. Before you change the flow type, make sure that the flow contains only elements, resources, and functionality that the new flow type supports.
`RunInMode`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The mode that the flow runs in. Valid values are: • DefaultMode — The flow version runs in system or user context, depending on how the flow is launched. • SystemModeWithSharing — The flow version always runs in system mode with sharing. The flow respects org-wide default settings, role hierarchies, sharing rules, manual sharing, teams, and territories. But it doesn't respect object permissions, field-level access, or other permissions of the running user.
`Status`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The flow's status. • `Active` • `Draft` • `Obsolete` • `InvalidDraft`
`VersionNumber`	**Type** int

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** The flow's version number.

Usage

Use this object to query information about flow versions. A query must be filtered by `DurableId` or `FlowDefinitionViewId` to get results.

Folder

Represents a repository for a Dashboard, Document, EmailTemplate, Macro, QuickText, or Report. Only one type of item can be contained in a folder.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

- You must have the "Modify All Data" permission to create, update, or delete document folders and email template folders.
- Guest and Customer Portal users can't access this object.
- To query this object, no special permissions are needed.
- As of API version 35.0, when a folder is shared with a role, it is only visible to users in that role. Superior roles in the role hierarchy don't gain visibility.
- If analytics folder sharing is turned on, then users need these permissions to create and manage report folders and dashboard folders:
  - "`Create Dashboard Folders`"
  - "`Create Report Folders`"
- To use folders for macros and quick text, enable folders for these objects in Setup on the Macro Settings and Quick Text Settings pages.

Fields

Field	Details
`AccessType`	**Type** picklist

Field	Details
	Properties Create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. Indicates who can access the Folder. Available values include: • `Hidden`—Folder is hidden from everyone. • `Public`—Folder is accessible by all users. • `Shared`—Folder is accessible only by a User in a particular Group or UserRole. The API doesn't allow you to view, insert, or update which group or Role the Folder is shared with. Note: If analytics folder sharing is turned on for your organization, then this field is present but not used.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is **Folder Unique Name**. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`IsReadonly`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this Folder is read-only (`true`) or editable (`false`). Label is *`Read Only`*. Note: If analytics folder sharing is turned on for your organization, then this field is present but not used.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update

Field	Details
	Description Label of the folder as it appears in the user interface. Label is **Document Folder Label**.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the parent object, if any.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** Required. Type of objects contained in the Folder. This field can't be updated. Available values include: • `Dashboard` • `Document` • `Email` (for Salesforce Classic email templates) • `EmailTemplate` (for Lightning email templates) • `Macro` • `QuickText`

Field	Details
	• `Report`

Usage

Only one type of item can be contained in a folder, either Dashboard, Document, EmailTemplate, Macro, QuickText, or Report.

SEE ALSO:

Object Basics

FolderedContentDocument

Represents the relationship between a parent and child ContentFolderItem in a ContentWorkspace.

Supported Calls

`describeSObjects()`

Fields

Field Name	Details
`ContentDocumentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the ContentDocument that can be in a folder.
`ContentSize`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** File size of the ContentDocument.
`FileExtension`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description File extension of the ContentDocument.
FileType	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** File type of the ContentDocument.
IsFolder	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates that the FolderedContentDocument is a folder, rather than a file.
ParentContentFolderId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the ContentFoldr the ContentDocument resides in.
Title	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** Name of the file or folder in a ContentFolder.

ForecastingAdjustment

This object represents an individual forecast manager's adjustment for a subordinate's or child territory's forecast via a ForecastingItem. Available in API versions 26 and greater. This object is separate from the ForecastingOwnerAdjustment object, which represents forecast users' adjustments of their *own* forecasts, including territory forecasts they own.

Note: This information only applies to Collaborative Forecasts.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Spring '20 and later, only standard users with the View All Forecasts or Allow Forecasting permission or delegated forecast manager status can access this object.

Fields

Field Name	Details
AdjustedAmount	**Type** double **Properties** Create, Filter, Sort, Update **Description** The revenue amount of an individual forecast item, after an adjustment.
AdjustedQuantity	**Type** double **Properties** Create, Filter, Sort, Update **Description** The quantity amount of an individual forecast item, after an adjustment. This field is available in API version 28 and later.
AdjustmentNote	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A text note providing information about the adjustment. The maximum length is 140 characters. This field does not appear in reports.
CurrencyIsoCode	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update

Field Name	Details
	Description The currency code of the adjustment. If omitted, the default is the importing user's personal currency.
ForecastCategoryName	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The category within the sales cycle that an opportunity is assigned to based on its opportunity stage. The standard forecast categories are Pipeline, Best Case, Commit, Omitted, and Closed. You can customize forecast category names. The forecast categories display information for that specific category; for example, Best Case only reflects amounts in the Best Case category.
ForecastingItemCategory	**Type** picklist **Properties** Create, Filter, Group, Sort **Description** This field indicates which type of forecast rollup the manager adjustment belongs to. Depending on whether your organization uses individual forecast category rollups or cumulative forecast rollups, you have these possible values for the `ForecastingItemCategory` field. ***Individual forecast category rollups:*** • PipelineOnly - Rollup from Pipeline opportunities only. • BestCaseOnly - Rollup from Best Case opportunities only. Adjustable. • CommitOnly - Rollup from Commit opportunities only. Adjustable. ***Cumulative forecast rollups:*** • OpenPipeline - Rollup from Pipeline + Best Case + Commit opportunities. • BestCaseForecast - Rollup from Best Case + Commit + Closed opportunities. Adjustable. • CommitForecast - Rollup from Commit + Closed opportunities. Adjustable. ***Either cumulative or individual forecast category rollups:*** • ClosedOnly - Rollup from Closed opportunities only. The `ForecastingItemCategory` field differs from the `ForecastCategoryName` field. • The `ForecastCategoryName` field represents the forecast category of the *underlying opportunities* rolling up to forecast amounts. In organizations using cumulative forecast rollups, the `ForecastCategoryName` field

Field Name	Details
	can be null because the cumulative forecast amounts include opportunities from multiple forecast categories. • The new `ForecastingItemCategory` field represents the *type of rollup* a forecast amount or adjustment is from. In organizations using individual forecast category columns, it contains the individual forecast rollup categories. In organizations using cumulative forecast rollups, it contains the cumulative rollup categories. When inserting manager adjustments, the values you insert for `ForecastCategoryName` and `ForecastingItemCategory` must be compatible with each other. In organizations using cumulative forecast rollups, the `ForecastCategoryName` is nillable. The following pairs are valid. **Individual forecast category rollups:** • `ForecastCategoryName`: BestCase, `ForecastingItemCategory`: BestCaseOnly • `ForecastCategoryName`: Commit, `ForecastingItemCategory`: CommitOnly **Cumulative forecast category rollups:** • `ForecastCategoryName`: null, `ForecastingItemCategory`: BestCaseForecast • `ForecastCategoryName`: null, `ForecastingItemCategory`: CommitForecast
ForecastingTypeId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the related ForecastingType.
ForecastingItemId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the related ForecastingItem.
IsAmount	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field Name	Details
	Description True indicates that the adjustment is made in a revenue amount. If false, then `IsQuantity` must be true. This field is available in API version 28 and later.
`IsQuantity`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** True indicates that the adjustment is made in a quantity amount. If false, then `IsAmount` must be true. This field is available in API version 28 and later.
`OwnerId`	**Type** reference **Properties** Create,Defaulted on create, Filter, Group, Sort **Description** The ID of the forecast owner.
`PeriodId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Period ID for the adjustment. Read only.
`ProductFamily`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort **Description** The Product Family for the adjustment. Read only. This field is available in API version 29 and later.
`StartDate`	**Type** date **Properties** Create, Filter, Group, Sort

Field Name	Details
	Description The start of the adjustment, expressed as month and year. The date can include any day in a given month. Stored using the first date of the month.
`Territory2Id`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the territory to forecast on. Available in API version 43 and later.

Usage

Use this object to obtain a manager's adjustment detail for a specified ForecastingItem. The ForecastingAdjustment object is visible to all users, but only forecast managers and users above them in the forecast hierarchy can read or write ForecastingAdjustment records.

Note: Beginning with API version 30.0, organizations can have more than one forecasting type enabled. The `ForecastingQuota`, `ForecastingAdjustment`, `ForecastingOwnerAdjustment`, `ForecastingItem`, and `ForecastingFact` objects can all have records with different `ForecastingTypeId` values. Use the ForecastingType object to determine the ID for each forecast type and then filter `ForecastingQuota`, `ForecastingAdjustment`, `ForecastingItem`, or `ForecastingFact` records as necessary.

SEE ALSO:

ForecastingFact

ForecastingItem

ForecastingQuota

ForecastingDisplayedFamily

Represents the table in Forecasts Settings where an admin selects the product families that users can forecast on in Lightning Experience. This object is available in API version 40.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

As of Spring '20 and later, only standard users with the View All Forecasts or Allow Forecasting permission or delegated forecast manager status can access this object.

Fields

Field Name	Details
`DisplayPosition`	**Type** int **Properties** Filter, Group, idLookup, Nillable, Sort **Description** The order in which product families are displayed on the forecasts page. Each value is unique to a product family.
`ProductFamily`	**Type** picklist **Properties** Filter, Group, Sort **Description** The product family available to forecast on. Each product family is unique.

ForecastingFact

This is a read-only object linking a ForecastingItem with its opportunities, such as opportunities that share the same owner or forecast category and have a closing date within the period of the forecasting item. Available in API versions 26 and greater.

Note: This information only applies to Collaborative Forecasts.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

As of Spring '20 and later, only standard users with the View All Forecasts or Allow Forecasting permission or delegated forecast manager status can access this object.

Fields

Field Name	Details
`ForecastCategoryName`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort

Field Name	Details
	Description A forecast category is the category within the sales cycle to which an opportunity is assigned based on its opportunity stage. The standard forecast categories are Pipeline, Best Case, Commit, Omitted, and Closed. You can customize the forecast category names.
ForecastedObjectId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Contains the Split ID of the forecasted OpportunitySplit object if the forecast data source is opportunity splits or the OpportunityLineItem ID of the forecasted opportunity if the data source is product families. If the data source is product families and the opportunity has no line item, this field is Null. If the forecast data source is opportunities, this field is Null. This field is available in API version 29 and later. Read only.
ForecastingItemId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the ForecastingItem.
ForecastingTypeId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the related ForecastingType.
OpportunityId	**Type** reference **Properties** Filter, Group, Sort **Description** The opportunity ID.
OwnerId	**Type** reference

Field Name	Details
	Properties Filter, Group, Sort **Description** The ID of the opportunity owner.
`PeriodId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Period ID for the forecast.
`Territory2Id`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the territory to forecast on. Available in API version 43 and later.

Usage

Use this object to get information about opportunities linked to forecasting items.

Note: Beginning with API version 30.0, organizations can have more than one forecasting type enabled. The `ForecastingQuota`, `ForecastingAdjustment`, `ForecastingOwnerAdjustment`, `ForecastingItem`, and `ForecastingFact` objects can all have records with different `ForecastingTypeId` values. Use the ForecastingType object to determine the ID for each forecast type and then filter `ForecastingQuota`, `ForecastingAdjustment`, `ForecastingItem`, or `ForecastingFact` records as necessary.

s

SEE ALSO:

ForecastingAdjustment

ForecastingItem

ForecastingQuota

ForecastingItem

This is a read-only object used for individual forecast amounts. Users see amounts based on their perspectives and forecast roles. The amounts users see include one of the following when forecasting in revenue: `AmountWithoutAdjustments`, `AmountWithoutManagerAdjustment`, `ForecastAmount`, `OwnerOnlyAmount`. The amounts users see include one of the following when forecasting in quantity: `QuantityWithoutAdjustments`, `QuantityWithoutManagerAdjustment`, `ForecastQuantity`, `OwnerOnlyQuantity`. Available in API versions 26 and greater.

Additionally, note that users:

- with the "View All Forecasts" permission have access to all ForecastingItem fields.
- without the "View All Forecasts" permission have access to all fields for their own subordinates and child territories.

Other users can see the ForecastingItem object, but not its records.

Note: This information only applies to Collaborative Forecasts.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

As of Spring '20 and later, only standard users with the View All Forecasts or Allow Forecasting permission or delegated forecast manager status can access this object.

Fields

Field Name	Details
`AmountWithoutAdjustments`	**Type** double **Properties** Filter, Sort, Nillable **Description** The sum of a person's owned revenue opportunities and the person's subordinates' and child territories' opportunities, without adjustments. Subordinates include everyone reporting up to a person in the role-based forecast hierarchy. This amount is visible only on reports.
`AmountWithoutManagerAdjustment`	**Type** double **Properties** Filter, Sort, Nillable

Field Name	Details
	Description The forecast number as seen by the forecast owner. This is the sum of the owner's revenue opportunities and the owner's subordinates' and child territories' opportunities, including adjustments made by the forecast owner on the owner's or subordinates' and child territories' forecasts. It doesn't include adjustments made by forecast managers above the owner in the forecast hierarchy.
`AmountWithoutOwnerAdjustment`	**Type** double **Properties** Filter, Sort, Nillable **Description** The forecast amount as seen by the forecast owner without the owner's adjustment. This is the sum of the subordinate's and child territories' opportunities, including adjustments made by their manager or by the subordinate themselves, plus the rollup of the owner's own opportunities. *It doesn't include adjustments made by the forecast owner.*
`ForecastAmount`	**Type** double **Properties** Filter, Sort, Nillable **Description** The revenue forecast from the forecast manager's perspective and the sum of the owner's and subordinates' and child territories' opportunities, including all forecast adjustments.
`ForecastCategoryName`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** A forecast category is the category within the sales cycle to which an opportunity is assigned based on its opportunity stage. The standard forecast categories are Pipeline, Best Case, Commit, Omitted, and Closed. You can customize the forecast category names.
`ForecastQuantity`	**Type** double **Properties** Filter, Sort, Nillable

Field Name	Details
	Description The quantity forecast from the forecast manager's perspective and the sum of the owner's and subordinates' opportunities, including all forecast adjustments. This field is available in API version 28 and later.
`ForecastingItemCategory`	**Type** picklist **Properties** Filter, Group, Sort **Description** This field indicates which type of forecast rollup the forecasting item belongs to. Depending on whether your organization uses individual forecast category rollups or cumulative forecast rollups, you have these possible values for the `ForecastingItemCategory` field. ***Individual forecast category rollups:*** • PipelineOnly - Rollup from Pipeline opportunities only. • BestCaseOnly - Rollup from Best Case opportunities only. Adjustable. • CommitOnly - Rollup from Commit opportunities only. Adjustable. ***Cumulative forecast rollups:*** • OpenPipeline - Rollup from Pipeline + Best Case + Commit opportunities. • BestCaseForecast - Rollup from Best Case + Commit + Closed opportunities. Adjustable. • CommitForecast - Rollup from Commit + Closed opportunities. Adjustable. ***Either cumulative or individual forecast category rollups:*** • ClosedOnly - Rollup from Closed opportunities only. The `ForecastingItemCategory` field differs from the `ForecastCategoryName` field. • The `ForecastCategoryName` field represents the forecast category of the *underlying opportunities* rolling up to forecast amounts. In organizations using cumulative forecast rollups, the `ForecastCategoryName` field can be null because the cumulative forecast amounts include opportunities from multiple forecast categories. • The new `ForecastingItemCategory` field represents the *type of rollup* a forecast amount or adjustment is from. In organizations using individual forecast category columns, it contains the individual forecast rollup categories. In organizations using cumulative forecast rollups, it contains the cumulative rollup categories.
`ForecastingTypeId`	**Type** reference

Field Name	Details
	Properties Filter, Group, Sort **Description** The ID of the related ForecastingType.
`HasAdjustment`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** A flag that indicates if the forecasting item includes a *manager* adjustment. This flag is true only when the item includes an adjustment and the user performing the query has read access to the adjustment.
`HasOwnerAdjustment`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** A flag that indicates if the forecasting item includes an *owner* adjustment. This flag is true only when the item includes an adjustment and the user performing the query has read access to the adjustment. Available in API versions 33 and greater.
`IsAmount`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** True indicates that the adjustment is made in a revenue amount. If false, then `IsQuantity` must be true. This field is available in API version 28 and later.
`IsQuantity`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** True indicates that the adjustment is made in a quantity amount. If false, then `IsAmount` must be true. This field is available in API version 28 and later.

Field Name	Details
IsUpToDate	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** A flag indicating whether or not a specific forecasting item reflects current information. For example, if users are making adjustments which are in process, the item won't be up-to-date.
OwnerId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the forecast owner.
OwnerOnlyAmount	**Type** double **Properties** Filter, Sort, Nillable **Description** The sum of a person's revenue opportunities, without adjustments.
OwnerOnlyQuantity	**Type** double **Properties** Filter, Sort, Nillable **Description** The sum of a person's quantity opportunities, without adjustments. This field is available in API version 28 and later.
ParentForecastingItemId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the ForecastingItem that the current item rolls up to.
PeriodId	**Type** reference

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** Period ID for the forecast.
ProductFamily	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** The product family of the forecast item. This field is available in API version 29 and later. Read only.
Territory2Id	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the territory to forecast on. Available in API version 43 and later.
QuantityWithoutAdjustments	**Type** double **Properties** Filter, Sort, Nillable **Description** The sum of a person's owned quantity opportunities and also his or her subordinates' opportunities, without adjustments. Subordinates include everyone reporting up to a person in the forecast hierarchy. This field is available in API version 28 and later.
QuantityWithoutManagerAdjustment	**Type** double **Properties** Filter, Sort, Nillable **Description** The forecast number as seen by the forecast owner. This is the sum of the owner's quantity opportunities and subordinates' opportunities, including adjustments made on the subordinates' forecasts. It doesn't include adjustments made by forecast managers above the owner in the forecast hierarchy. This field is available in API version 28 and later.

Field Name	Details
`QuantityWithoutOwnerAdjustment`	**Type** double **Properties** Filter, Sort, Nillable **Description** The forecast quantity as seen by the forecast owner without the owner's adjustment. This is the sum of the subordinate's opportunities, including adjustments made by their manager or by the subordinate themselves, plus the rollup of the owner's own opportunities. *It doesn't include adjustments made by the forecast owner*. This field is available in API version 38.0 and later.
`SubordinateOverrides`	**Type** int **Properties** Filter, Group, Sort **Description** The total number of adjustments made to a forecast down the hierarchical chain. For example, User A has a forecast without adjustments. If User A adjusts User B's forecast, User A's `SubordinateOverrides` value is 1. Then if User B adjusts User C's forecast, User A's `SubordinateOverrides` value is 2. If User A removes his adjustment from User B's forecast, User A's `SubordinateOverrides` value is 1. This field is available in API version 38.0 and later.

Usage

Use this object to obtain individual forecast amounts, either with or without adjustments, based on a user's perspective and forecast role. The ForecastingItem object is visible to all users, but only forecast managers and users above them in the forecast hierarchy can read or write ForecastingAdjustment records.

Note: Beginning with API version 30.0, organizations can have more than one forecasting type enabled. The `ForecastingQuota`, `ForecastingAdjustment`, `ForecastingOwnerAdjustment`, `ForecastingItem`, and `ForecastingFact` objects can all have records with different `ForecastingTypeId` values. Use the ForecastingType object to determine the ID for each forecast type and then filter `ForecastingQuota`, `ForecastingAdjustment`, `ForecastingItem`, or `ForecastingFact` records as necessary.

SEE ALSO:

ForecastingAdjustment

ForecastingFact

ForecastingQuota

ForecastingOwnerAdjustment

This object represents an individual forecast user's adjustment of their *own* forecast, including territory forecasts they own, via a ForecastingItem. Available in API versions 33 and greater. This object is separate from the ForecastingAdjustment object, which represents managers' adjustments of *subordinates'* and child territories' forecasts.

Note: This information only applies to Collaborative Forecasts.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Spring '20 and later, only standard users with the View All Forecasts or Allow Forecasting permission or delegated forecast manager status can access this object.

Fields

Field Name	Details
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The currency code of the adjustment. If omitted, the default is the importing user's personal currency.
`ForecastCategoryName`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The category within the sales cycle that an opportunity is assigned to based on its opportunity stage. The standard forecast categories are Pipeline, Best Case, Commit, Omitted, and Closed. You can customize forecast category names. The forecast categories display information for that specific category; for example, Best Case only reflects amounts in the Best Case category.
`ForecastingItemCategory`	**Type** picklist

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** This field indicates which type of forecast rollup the owner adjustment belongs to. Depending on whether your organization uses individual forecast category rollups or cumulative forecast rollups, you have these possible values for the `ForecastingItemCategory` field. ***Individual forecast category rollups:*** • PipelineOnly - Rollup from Pipeline opportunities only. • BestCaseOnly - Rollup from Best Case opportunities only. Adjustable. • CommitOnly - Rollup from Commit opportunities only. Adjustable. ***Cumulative forecast rollups:*** • OpenPipeline - Rollup from Pipeline + Best Case + Commit opportunities. • BestCaseForecast - Rollup from Best Case + Commit + Closed opportunities. Adjustable. • CommitForecast - Rollup from Commit + Closed opportunities. Adjustable. ***Either cumulative or individual forecast category rollups:*** • ClosedOnly - Rollup from Closed opportunities only. The `ForecastingItemCategory` field differs from the `ForecastCategoryName` field. • The `ForecastCategoryName` field represents the forecast category of the *underlying opportunities* rolling up to forecast amounts. In organizations using cumulative forecast rollups, the `ForecastCategoryName` field can be null because the cumulative forecast amounts include opportunities from multiple forecast categories. • The new `ForecastingItemCategory` field represents the *type of rollup* a forecast amount or adjustment is from. In organizations using individual forecast category columns, it contains the individual forecast rollup categories. In organizations using cumulative forecast rollups, it contains the cumulative rollup categories. When inserting owner adjustments, the values you insert for `ForecastCategoryName` and `ForecastingItemCategory` must be compatible with each other. In organizations using cumulative forecast rollups, the `ForecastCategoryName` is nillable. These are the valid pairs. **Individual forecast category rollups:** • `ForecastCategoryName`: BestCase, `ForecastingItemCategory`: BestCaseOnly • `ForecastCategoryName`: Commit, `ForecastingItemCategory`: CommitOnly

Field Name	Details
	Cumulative forecast category rollups: • `ForecastCategoryName`: null, `ForecastingItemCategory`: BestCaseForecast • `ForecastCategoryName`: null, `ForecastingItemCategory`: CommitForecast
`ForecastingItemId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the related ForecastingItem.
`ForecastingTypeId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the related ForecastingType.
`ForecastOwnerId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the forecast owner.
`IsAmount`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** True indicates that the adjustment is made in a revenue amount. If false, then `IsQuantity` must be true.
`IsQuantity`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field Name	Details
	Description True indicates that the adjustment is made in a quantity amount. If false, then `IsAmount` must be true.
`OwnerAdjustedAmount`	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** The revenue amount of an individual forecast item, after an adjustment.
`OwnerAdjustedQuantity`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The quantity amount of an individual forecast item, after an adjustment.
`OwnerAdjustmentNote`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A text note providing information about the adjustment. The maximum length is 140 characters. This field does not appear in reports.
`PeriodId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Period ID for the adjustment. Read only.
`ProductFamily`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort **Description** The Product Family for the adjustment. Read only.

Field Name	Details
`StartDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort **Description** The start of the adjustment, expressed as month and year. The date can include any day in a given month. Stored using the first date of the month.
`Territory2Id`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the territory to forecast on. Available in API version 43 and later.

Usage

Use this object to obtain a user's adjustment detail for a specified ForecastingItem in their own forecast.

Note: Beginning with API version 30.0, organizations can have more than one forecasting type enabled. The `ForecastingQuota`, `ForecastingAdjustment`, `ForecastingOwnerAdjustment`, `ForecastingItem`, and `ForecastingFact` objects can all have records with different `ForecastingTypeId` values. Use the ForecastingType object to determine the ID for each forecast type and then filter `ForecastingQuota`, `ForecastingAdjustment`, `ForecastingItem`, or `ForecastingFact` records as necessary.

ForecastingQuota

This object represents an individual user's or territory's quota for a specified time period. The "Manage Quotas" user permission is required for creating, updating, or deleting quotas. (Users can only edit their subordinates' or child territories' quotas, not their own.) The "View All Forecasts" permission is required to View any user's forecast, regardless of the forecast hierarchy. Available in API versions 25 and greater. Forecast managers can view the forecasts of subordinates and territories below them in the forecast hierarchy.

Note: This information only applies to Collaborative Forecasts.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Spring '20 and later, only standard users with the View All Forecasts or Allow Forecasting permission or delegated forecast manager status can access this object.

Fields

Field Name	Details
CurrencyIsoCode	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** The currency code of the quota. If omitted, the default is the importing user's personal currency.
ForecastingTypeId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the related ForecastingType.
IsAmount	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** True indicates that the adjustment is made in a revenue amount. If false, then `IsQuantity` must be true. This field is available in API version 28 and later.
IsQuantity	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** True indicates that the adjustment is made in a quantity amount. If false, then `IsAmount` must be true. This field is available in API version 28 and later.
PeriodId	**Type** reference

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** Period ID for the quota. Read only.
`ProductFamily`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort **Description** The product family for the quota. This field is available in API version 29 and later.
`Territory2Id`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the territory to forecast on. Available in API version 43 and later.
`QuotaAmount`	**Type** currency **Properties** Create, Filter, Sort, Update **Description** The revenue quota amount for an individual user or territory and for a specific period.
`QuotaOwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID that identifies the quota owner.
`QuotaQuantity`	**Type** double **Properties** Create, Filter, Sort, Update

Field Name	Details
	Description The quantity quota amount for an individual user and for a specific period. This field is available in API version 28 and later.
`StartDate`	**Type** date **Properties** Create, Filter, Group, Sort, Update **Description** The start of the quota, expressed as month and year. The date can include any day in a given month. Stored using the first date of the month.

Usage

Use this object to get an individual user's or territory's quota for a specified time period.

Note: Beginning with API version 30.0, organizations can have more than one forecasting type enabled. The `ForecastingQuota`, `ForecastingAdjustment`, `ForecastingOwnerAdjustment`, `ForecastingItem`, and `ForecastingFact` objects can all have records with different `ForecastingTypeId` values. Use the ForecastingType object to determine the ID for each forecast type and then filter `ForecastingQuota`, `ForecastingAdjustment`, `ForecastingItem`, or `ForecastingFact` records as necessary.

SEE ALSO:
ForecastingAdjustment
ForecastingFact
ForecastingItem

ForecastingShare

Represents forecasts shared between a forecast manager and a user. Available in API version 44.0 and later.

Note: This information applies to Collaborative Forecasts and not to Customizable Forecasting.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Spring '20 and later, only standard users with the View All Forecasts or Allow Forecasting permission or delegated forecast manager status can access this object.

Fields

Field Name	Details
AccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** Whether the user you're sharing your forecasts with can view and adjust the forecasts or view only. This field is new since the pilot. Picklist values: • ViewAndEdit • ViewOnly
SharedForecastManagerRoleId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of either of the following: • The role of the manager whose forecasts you want to share. • The territory whose forecasts you want to share.
RoleType	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of hierarchy associated with the forecast share. • R - Role-based • T - Territory-based • Y - Territory2-based
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the user with whom the forecast is shared.

Usage

Use this object to let any stakeholder at your company view and adjust forecast managers' forecasts.

ForecastingType

This object is used to identify the forecast type associated with `ForecastingAdjustment`, `ForecastingOwnerAdjustment`, `ForecastingQuota`, `ForecastingFact`, and `ForecastingItem` objects. Available in API versions 30.0 and greater.

Note: This information only applies to Collaborative Forecasts.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

As of Spring '20 and later, only standard users with the View All Forecasts or Allow Forecasting permission or delegated forecast manager status can access this object.

Fields

Field Name	Details
`CanDisplayQuotas`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Whether a forecast type can show quota information. Available in API version 38.0 and later.
`DateType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The date type that forecast amounts are based on. Values are: • `OpportunityCloseDate`: Base forecasts on opportunity close dates. • `ProductDate`: Base forecasts on opportunity product line item dates, if available. • `ScheduleDate`: Base forecasts on opportunity product schedule dates, if available.

Field Name	Details
	Available in API version 42.0 and later.
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The name of the forecasting type. Allowed values include: • `LineItemQuantityProductDate` : Product Families - Quantity by product date. Available in API version 47.0 and later. • `LineItemQuantityScheduleDate` : Product Families - Quantity by schedule date. Available in API version 47.0 and later. • `LineItemRevenueProductDate` : Product Families - Revenue by product date. Available in API version 47.0 and later. • `LineItemRevenueScheduleDate` : Product Families - Revenue by schedule date. Available in API version 47.0 and later. • `OpportunityLineItemQuantity` : Product Families - Quantity • `OpportunityLineItemRevenue` : Product Families - Revenue • `OpportunityOverlayRevenue` : Opportunity Overlay Splits - Revenue • `OpportunityQuantity` : Opportunities - Quantity • `OpportunityQuantityProductDate` : Opportunities - Quantity by product date. Available in API version 43.0 and later. • `OpportunityQuantityScheduleDate` : Opportunities - Quantity by schedule date. Available in API version 43.0 and later. • `OpportunityRevenue` : Opportunities - Revenue • `OpportunityRevenueProductDate` : Opportunities - Revenue by product date. Available in API version 43.0 and later. • `OpportunityRevenueScheduleDate` : Opportunities - Revenue by schedule date. Available in API version 43.0 and later. • `OpportunitySplitRevenue` : Opportunity Revenue Splits - Revenue • ***`Territory_Model_NameN`***: Territories, where *`Territory_Model_Name`* is the name of your active territory model in the API. *`Territory_Model_Name`* can be followed by *`N`*, an auto-generated number that distinguishes between territory forecast types. Available in API version 44.0 and later. • ***`Territory_Model_NameN`***`_ProductFamily`: Deprecated. Territories - Product Families, where *`Territory_Model_Name`* is the name of your active territory model in the API and can be followed by *`N`*, an auto-generated number that distinguishes between territory forecast types. Available in API version 45.0 and 46.0. For territory models created in API version 47.0 and later, ***`Territory_Model_NameN`*** is used.

Field Name	Details
	• The name of a custom opportunity split type that has been enabled as a forecast type. Custom split types are based on currency fields, which can contain revenue amounts only. The `DeveloperName` is called `name` in the Metadata API and Forecasting Type in custom reports.
`HasProductFamily`	**Type** boolean **Properties** Defaulted on create, Group **Description** Indicates whether a forecasts view includes product families. Available in API version 40.0 and later.
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the forecasting type is enabled.
`IsAmount`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the forecasting type is based on the revenue measurement.
`IsQuantity`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the forecasting type is based on the quantity measurement.
`Language`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort

Field Name	Details
	Description The language of the forecasting type.
`MasterLabel`	**Type** string **Properties** Filter, Group, Sort **Description** Master label for this Forecasting Type value. This display value is the internal label that does not get translated.
`OpportunitySplitTypeId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates whether the forecasting type has a split type, and if so, the name the split type. Available in API version 41.0 and later.
`RoleType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Indicates whether the role type has a forecasting type, and if so, which forecasting type. Possible values are `R` (user role-based forecasting type), `T` (Territory1-based forecasting type; not used), and `Y` (Territory2-based forecasting type). Available in API version 41.0 and later.
`Territory2ModelId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates whether the forecasting type has a Territory2 model, and if so, the name of the Territory2 model. Available in API version 41.0 and later.

Usage

Use this object to identify the forecast type of `ForecastingAdjustment`, `ForecastingQuota`, `ForecastingFact`, and `ForecastingItem` objects.

ForecastingUserPreference

Represents the forecasting selections that a user has made, such as display options, date range, forecasting type, and currency.

Supported Calls

`create()`, `describeSObjects()`, `query()`, `update()`, `upsert()`

Special Access Rules

As of Spring '20 and later, only standard users with the View All Forecasts or Allow Forecasting permission or delegated forecast manager status can access this object.

Fields

Field Name	Details
`ExternalId`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A unique system-generated numerical identifier for the user.
`ForecastingDisplayedTypeId`	**Type** reference **Properties** Create, Group, Sort, Update **Description** An identifier for the forecasting type that's displayed.
`ForecastingPeriodDuration`	**Type** int **Properties** Create, Group, Nillable, Sort, Update **Description** How long the forecasting period lasts.

Field Name	Details
ForecastingPeriodType	**Type** picklist **Properties** Create, Group, Nillable, Restricted picklist, Sort, Update **Description** The forecasting period's type. Valid values include: Month, Quarter, Week, or Year
ForecastingStartPeriod	**Type** int **Properties** Create, Group, Nillable, Sort, Update **Description** The date when the forecasting period begins.
ForecastingViewCurrency	**Type** string **Properties** Create, Group, Nillable, Sort, Update **Description** The currency shown on the forecasts page.
IsForecastingHideZeroRows	**Type** boolean **Properties** Create, Defaulted on create, Group, Sort, Update **Description** Whether the forecasts page shows zero-value rows.
IsForecastingShowQuantity	**Type** boolean **Properties** Create, Defaulted on create, Group, Sort, Update **Description** Whether the forecasts page shows forecast quantity.
IsHideForecastingGuidedTour	**Type** boolean **Properties** Create, Defaulted on create, Group, Sort, Update

Field Name	Details
	Description Whether the forecasts page shows the guided tour.
IsHideForecastingQuotaColumn	**Type** boolean **Properties** Create, Defaulted on create, Group, Sort, Update **Description** Whether the forecasts page shows a quota column.
IsShowForecastingQuotaAttainment	**Type** boolean **Properties** Create, Defaulted on create, Group, Sort, Update **Description** Whether the forecasts page shows quota attainment information.

FormulaFunction

Represents a function used when building a formula, including examples and uses. This object is available in API version 47.0 and later.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field	Details
CategoryId	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ID of the FormulaFunctionCategory.
Description	**Type** string

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** Description of the formula function.
`DurableId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Unique identifier for the field. Always retrieve this value before using it, as the value isn't guaranteed to stay the same from one release to the next. To simplify queries, use this field.
`ExampleString`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Describes the function and what arguments you can use with it.
`IsAllowedInEntityContext`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether you can use the formula function on an Entity (`true`) or not (`false`). For example, you cannot use the PRIORVALUE function in a custom Account formula field. The default value is `false`. This field is removed in API version 48.0 and later. Use the FormulaFunctionAllowedType on page 1538 object instead.
`IsAllowedInFlowContext`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the formula function is allowed in a Flow (`true`) or not (`false`). The default value is `false`. This field is removed in API version 48.0 and later. Use the FormulaFunctionAllowedType on page 1538 object instead.
`IsAllowedInVisualforceContext`	**Type** boolean

Field	Details
	Properties Defaulted on create, Filter, Group, Sort **Description** Indicates whether the formula function is allowed in Visualforce (`true`) or not (`false`). The default value is `false`. This field is removed in API version 48.0 and later. Use the FormulaFunctionAllowedType on page 1538 object instead.
`Label`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The formula function label that appears in the user interface.
`Name`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the formula function.

Usage

Query FormulaFunction to search for available formula functions, such as `AND()`, `ISBLANK()`, `MAX()`, `MIN()`, and others.

FormulaFunctionAllowedType

Represents the functions that are supported in the given formula context. This object is available in API version 48.0 and later.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field	Details
`DurableId`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description Unique identifier for the field. Always retrieve this value before using it, as the value isn't guaranteed to stay the same from one release to the next. To simplify queries, use this field.
`FunctionId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Unique identifier for the supported function.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The name of the formula type in which the function is supported. Possible values are: • `FLOW` • `VALIDATION` • `VISUALFORCE`

FormulaFunctionCategory

Represents the category to which a formula belongs when building a formula. This object is available in API version 47.0 and later.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field	Details
`DurableId`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description Unique identifier for the field. Always retrieve this value before using it, as the value isn't guaranteed to stay the same from one release to the next. To simplify queries, use this field.
`Label`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Label of the FormulaFunctionCategory that appears in the user interface.
`Name`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of the FormulaFunctionCategory.

Usage

Query FormulaFunctionCategory to search for categories of available formula functions, such as `Math`, `Logical`, `Date and Time`, and others.

FulfillmentOrder

Represents a group of products and delivery charges on a single order that share the same fulfillment location, delivery method, and recipient. The FulfillmentOrderLineItems belonging to a FulfillmentOrder are associated with OrderItemSummary objects belonging to a single OrderSummary. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is only available in Salesforce Order Management orgs.

Fields

Field	Details
AccountId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the Account or Person Account associated with the FulfillmentOrder. It represents the shopper in the storefront.
BillToContactId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the Contact associated with the FulfillmentOrder. It represents the shopper in the storefront when not using person accounts. This field is available in API version 49.0 and later.
CurrencyIsoCode	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** ISO code for the currency of the OrderSummary associated with the FulfillmentOrder. The default value is USD. Possible values are: • DKK—Danish Krone • EUR—Euro • GBP—British Pound • USD—U.S. Dollar This field is available in API version 49.0 and later.
DeliveryMethodId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the DeliveryMethod used for this FulfillmentOrder.

Field	Details
FulfilledFromLocationId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the Location handling this FulfillmentOrder.
FulfilledToAddress	**Type** address **Properties** Filter, Nillable **Description** Address of the recipient.
FulfilledToCity	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Recipient address city.
FulfilledToCountry	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Recipient address country.
FulfilledToEmailAddress	**Type** email **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Email address of the recipient.
FulfilledTo GeocodeAccuracy	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Accuracy of the geocode for the recipient address.

Field	Details
	Possible values are: • Address • Block • City • County • ExtendedZip • NearAddress • Neighborhood • State • Street • Unknown • Zip
FulfilledToLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with FulfilledToLongitude to specify the precise geolocation of the recipient address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
FulfilledToLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with FulfilledToLatitude to specify the precise geolocation of the recipient address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
FulfilledToName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Name on the recipient address.
FulfilledToPhone	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description Phone number of the recipient.
FulfilledToPostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Recipient address postal code.
FulfilledToState	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Recipient address state.
FulfilledToStreet	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Recipient address street.
FulfillmentOrderNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** ID of the FulfillmentOrder.
GrandTotalAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total, including adjustments and tax, of the products and delivery charges on the FulfillmentOrder. This amount includes all FulfillmentOrderLineItems associated with the FulfillmentOrder. This amount is equal to TotalAmount + TotalTaxAmount.
InvoiceId	**Type** reference

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** ID of the Invoice associated with the FulfillmentOrder.
`IsSuspended`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the FulfillmentOrder is suspended. The default value is false.
`ItemCount`	**Type** double **Properties** Filter, Nillable, Sort **Description** Sum of the quantities of the FulfillmentOrderLineItems included in the FulfillmentOrder.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Timestamp for when the current user last viewed this record. A null value can mean that this record has only been referenced (LastReferencedDate) and not viewed.
`OrderId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the original Order that generated the FulfillmentOrder.

Field	Details
OrderSummaryId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the OrderSummary associated with the FulfillmentOrder.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the User who currently owns this FulfillmentOrder. Default value is the User logged in to the API to perform the create.
Status	**Type** picklist **Properties** Create, Filter, Group, Sort, Update **Description** Status of the FulfillmentOrder. Each status corresponds to one status category, shown here in parentheses. You can customize the status picklist to represent your business processes, but the status category picklist is fixed because processing is based on those values. If you customize the status picklist, include at least one status value for each status category. Default values are: • `Allocated` (Activated) • `Assigned` (Fulfilling) • `Cancelled` (Cancelled) • `Draft` (Draft) • `Fulfilled` (Closed) • `Pickpack` (Fulfilling)
StatusCategory	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Status category of the FulfillmentOrder. Processing of the FulfillmentOrder depends on this value. Each status category corresponds to one or more statuses. Possible values are: • `ACTIVATED`—Activated

Field	Details
	• `CANCELLED`—Cancelled • `CLOSED`—Closed • `DRAFT`—Draft • `FULFILLING`—Fulfilling
`TaxLocaleType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The system used to handle tax on the original Order associated with the FulfillmentOrder. Gross usually applies to taxes like value-added tax (VAT), and Net usually applies to taxes like sales tax. Possible values are: • `Gross` (displays most prices and taxes as combined values) • `Net` (displays most prices and taxes as separate values) This field is available in API version 49.0 and later.
`TotalAdjustmentAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of the price adjustments applied to the products on the FulfillmentOrder. This value only includes adjustments to FulfillmentOrderLineItems of type code Product.
`TotalAdjustment AmtWithTax`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of the price adjustments applied to the products on the FulfillmentOrder, inclusive of tax. This value only includes adjustments to FulfillmentOrderLineItems of type code Product. This amount is equal to TotalAdjustmentAmount + TotalAdjustmentTaxAmount. This field is available in API version 49.0 and later.
`TotalAdjustmentTaxAmount`	**Type** currency **Properties** Filter, Nillable, Sort

Field	Details
	Description Tax on the TotalAdjustmentAmount.
TotalAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Adjusted total, not including tax, of the FulfillmentOrderLineItems, including products and delivery charges, on the FulfillmentOrder.
TotalDelivery AdjustAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of the price adjustments applied to the delivery charges on the FulfillmentOrder. This value only includes adjustments to FulfillmentOrderLineItems of type code Charge.
TotalDeliveryAdjust AmtWithTax	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of the price adjustments applied to the delivery charges on the FulfillmentOrder, inclusive of tax. This value only includes adjustments to FulfillmentOrderLineItems of type code Charge. This amount is equal to TotalDeliveryAdjustAmount + TotalDeliveryAdjustTaxAmount. This field is available in API version 49.0 and later.
TotalDelivery AdjustTaxAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Tax on the TotalDeliveryAdjustAmount.
TotalDeliveryAmount	**Type** currency **Properties** Filter, Nillable, Sort

Field	Details
	Description Total of the delivery charges on the FulfillmentOrder. This value only includes FulfillmentOrderLineItems of type code Charge.
`TotalDeliveryAmtWithTax`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of the delivery charges on the FulfillmentOrder, inclusive of tax. This value only includes FulfillmentOrderLineItems of type code Charge. This amount is equal to TotalDeliveryAmount + TotalDeliveryTaxAmount. This field is available in API version 49.0 and later.
`TotalDeliveryTaxAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Tax on the TotalDeliveryAmount.
`TotalProductAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total price of the products on the FulfillmentOrder. This value only includes FulfillmentOrderLineItems of type code Product.
`TotalProductAmtWithTax`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total price of the products on the FulfillmentOrder, inclusive of tax. This value only includes FulfillmentOrderLineItems of type code Product. This amount is equal to TotalProductAmount + TotalProductTaxAmount. This field is available in API version 49.0 and later.
`TotalProductTaxAmount`	**Type** currency

Field	Details
	Properties Filter, Nillable, Sort **Description** Tax on the TotalProductAmount.
`TotalTaxAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Tax on the TotalAmount.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Type of the FulfillmentOrder. Each type corresponds to one type category, shown here in parentheses. You can customize the type picklist to represent your business processes, but the type category picklist is fixed because processing is based on those values. If you customize the type picklist, include at least one type value for each type category. Default values are: • `Download` (Digital) • `Email` (Digital) • `In Store Pickup` (Physical) • `Retail Store` (Physical) • `Supplier` (Drop Ship) • `Warehouse` (Physical)
`TypeCategory`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Type category of the FulfillmentOrder. Processing of the FulfillmentOrder depends on this value. Each type category corresponds to one or more types. Possible values are: • `DIGITAL`—Digital • `DROPSHIP`—Drop Ship • `PHYSICAL`—Physical

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

FulfillmentOrderFeed
Feed tracking is available for the object.

FulfillmentOrderOwnerSharingRule
Sharing rules are available for the object.

FulfillmentOrderShare
Sharing is available for the object.

SEE ALSO:
FulfillmentOrderLineItem
Order
OrderSummary

FulfillmentOrderItemAdjustment

Represents a price adjustment on a FulfillmentOrderLineItem. Corresponds to an OrderItemAdjustmentLineSummary associated with the corresponding OrderItemSummary. This object is available in API version 48.0 and later.

This object is used for calculations and doesn't have a default record page.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

This object is only available in Salesforce Order Management orgs.

Fields

Field	Details
`Amount`	**Type** currency **Properties** Create, Filter, Sort **Description** Amount, not including tax, of the adjustment.
`CampaignName`	**Type** string

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** Campaign associated with the adjustment.
CouponName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Coupon associated with the adjustment.
CurrencyIsoCode	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** ISO code for the currency of the FulfillmentOrderLineItem to which the adjustment applies. The default value is USD. Possible values are: • DKK—Danish Krone • EUR—Euro • GBP—British Pound • USD—U.S. Dollar This field is available in API version 49.0 and later.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** Text description of the adjustment.
FulfillmentOrderId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the FulfillmentOrder associated with the FulfillmentOrderLineItem to which the adjustment applies.

Field	Details
FulfillmentOrderItemAdjustmentNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** ID of the FulfillmentOrderLineItemAdjustment.
FulfillmentOrderLineItemId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the FulfillmentOrderLineItem to which this adjustment applies.
OrderItemAdjustLineSummaryId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the OrderItemAdjustmentLineSummary associated with the adjustment.
PromotionName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Promotion associated with the adjustment.
TotalAmtWithTax	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of the adjustment, inclusive of tax. This amount is equal to Amount + TotalTaxAmount. This field is available in API version 49.0 and later.
TotalTaxAmount	**Type** currency **Properties** Filter, Nillable, Sort

Field	Details
	Description Tax on the Amount.

SEE ALSO:

FulfillmentOrder

FulfillmentOrderItemTax

FulfillmentOrderLineItem

OrderItemAdjustmentLineSummary

FulfillmentOrderItemTax

Represents the tax on a FulfillmentOrderLineItem or FulfillmentOrderItemAdjustment. Corresponds to an OrderItemTaxLineItemSummary. This object is available in API version 48.0 and later.

This object is used for calculations and doesn't have a default record page.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

This object is only available in Salesforce Order Management orgs.

Fields

Field	Details
`Amount`	**Type** currency **Properties** Create, Filter, Sort **Description** Amount of tax represented by the FulfillmentOrderItemTax.
`CurrencyIsoCode`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort

Field	Details
	Description ISO code for the currency of the FulfillmentOrderLineItem to which the tax applies. The default value is USD. Possible values are: • `DKK`—Danish Krone • `EUR`—Euro • `GBP`—British Pound • `USD`—U.S. Dollar This field is available in API version 49.0 and later.
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of the FulfillmentOrderItemTax.
`FulfillmentOrderId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the associated FulfillmentOrder.
`FulfillmentOrderItemAdjustId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** If this object represents tax on an adjustment, this value is the ID of the FulfillmentOrderItemAdjustment to which the tax applies. If this value is null, the adjustment applies to a FulfillmentOrderLineItem.
`FulfillmentOrderItemTaxNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** ID of the FulfillmentOrderItemTax.

Field	Details
FulfillmentOrderLineItemId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** If this object represents tax on a FulfillmentOrderLineItem, this value is the ID of that FulfillmentOrderLineItem. If this object represents tax on an adjustment, this value is the ID of the FulfillmentOrderLineItem to which the adjustment applies.
OrderItemTaxLineItemSummaryId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the OrderItemTaxLineItemSummary associated with the OrderItemSummary that corresponds to the FulfillmentOrderLineItem to which the tax applies.
Rate	**Type** percent **Properties** Create, Filter, Nillable, Sort, Update **Description** Tax rate used to calculate the Amount.
TaxEffectiveDate	**Type** date **Properties** Create, Filter, Group, Sort, Update **Description** Date on which the Amount was calculated. Important due to tax rate changes over time.
Type	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Indicates whether the Amount is actual or estimated. Possible values are: • Actual

Field	Details
	• `Estimated`

SEE ALSO:

FulfillmentOrder

FulfillmentOrderItemAdjustment

FulfillmentOrderLineItem

OrderItemTaxLineItemSummary

FulfillmentOrderLineItem

Represents a product or delivery charge belonging to a FulfillmentOrder. Corresponds to an OrderItemSummary. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

This object is only available in Salesforce Order Management orgs.

Fields

Field	Details
`CurrencyIsoCode`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** ISO code for the currency of the FulfillmentOrder associated with the FulfillmentOrderLineItem. The default value is USD. Possible values are: • `DKK`—Danish Krone • `EUR`—Euro • `GBP`—British Pound • `USD`—U.S. Dollar This field is available in API version 49.0 and later.

Field	Details
Description	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of the FulfillmentOrderLineItem.
EndDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort **Description** End date of the FulfillmentOrderLineItem.
FulfillmentOrderId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the FulfillmentOrder associated with the FulfillmentOrderLineItem.
FulfillmentOrder LineItemNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** ID of the FulfillmentOrderLineItem.
GrossUnitPrice	**Type** currency **Properties** Create, Filter, Nillable, Sort **Description** Unit price, including tax, of the FulfillmentOrderLineItem. This value is equal to TotalPrice + TotalTaxAmount. This field is available in API version 49.0 and later.
OrderItemId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort

Field	Details
	Description ID of the original OrderItem for the OrderItemSummary associated with the FulfillmentOrderLineItem.
`OrderItemSummaryId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the OrderItemSummary associated with the FulfillmentOrderLineItem.
`OriginalQuantity`	**Type** double **Properties** Create, Filter, Sort **Description** Original quantity of the FulfillmentOrderLineItem.
`Product2Id`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the product represented by the FulfillmentOrderLineItem.
`Quantity`	**Type** double **Properties** Create, Filter, Sort, Update **Description** Current quantity of the FulfillmentOrderLineItem. Equal to the original quantity minus any canceled quantity.
`QuantityUnitOfMeasure`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** Unit of measure of the quantity, for example: unit, gallon, ton, or case.
`ServiceDate`	**Type** dateTime

Field	Details
	Properties Create, Filter, Nillable, Sort **Description** Service or start date of the FulfillmentOrderLineItem.
`TotalAdjustmentAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total of any price adjustments applied to the FulfillmentOrderLineItem.
`TotalAdjustmentAmountWithTax`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of the price adjustments applied to the FulfillmentOrderLineItem, inclusive of tax. This amount is equal to TotalAdjustmentAmount + TotalAdjustmentTaxAmount. This field is available in API version 49.0 and later.
`TotalAdjustmentTaxAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Tax on the TotalAdjustmentAmount.
`TotalAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total, including adjustments and tax, of the FulfillmentOrderLineItem.
`TotalLineAmount`	**Type** currency **Properties** Create, Defaulted on create, Filter, Nillable, Sort **Description** Total, not including adjustments or tax, of the FulfillmentOrderLineItem.

Field	Details
TotalLineAmountWithTax	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total price of the FulfillmentOrderLineItem, inclusive of tax. This amount is equal to TotalLineAmount + TotalLineTaxAmount. This field is available in API version 49.0 and later.
TotalLineTaxAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Tax on the TotalLineAmount.
TotalPrice	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total, including adjustments but not tax, of the FulfillmentOrderLineItem. Equal to UnitPrice times Quantity.
TotalTaxAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Tax on the TotalPrice.
Type	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** Type of the FulfillmentOrderLineItem. Matches the type of the associated OrderItemSummary. Delivery Charge indicates that the FulfillmentOrderLineItem represents a delivery charge. Order Product indicates that it represents any other type of product, service, or charge. Each type corresponds to one type code, shown here in parentheses. Possible values are:

Field	Details
	• `Delivery Charge` • `Order Product`
`TypeCode`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** Type code of the FulfillmentOrderLineItem. Matches the type code of the associated OrderItemSummary. Processing depends on this value. Charge indicates that the FulfillmentOrderLineItem represents a delivery charge. Product indicates that it represents any other type of product, service, or charge. Each type category corresponds to one or more types. Possible values are: • `Charge` • `Product`
`UnitPrice`	**Type** currency **Properties** Create, Defaulted on create, Filter, Nillable, Sort **Description** Unit price of the FulfillmentOrderLineItem.

SEE ALSO:

FulfillmentOrder

FulfillmentOrderItemAdjustment

FulfillmentOrderItemTax

OrderItemSummary

FunctionInvocationRequest (Beta)

Represents invocation information for a Salesforce Function. This object is available in API version 51.0 and later.

Note: As a beta feature, Salesforce Functions is a preview and isn't part of the "Services" under your master subscription agreement with Salesforce. Use this feature at your sole discretion, and make your purchase decisions only on the basis of generally available products and features. Salesforce doesn't guarantee general availability of this feature within any particular time frame or at all, and we can discontinue it at any time. This feature is for evaluation purposes only, not for production use. It's offered as is and isn't supported, and Salesforce has no liability for any harm or damage arising out of or in connection with it. All restrictions, Salesforce reservation of rights, obligations concerning the Services, and terms for related Non-Salesforce Applications and Content apply equally to your use of this feature. You can provide feedback and suggestions for Salesforce Functions in the Salesforce Functions Trailblazer Community. For information on enabling this feature in your org, contact Salesforce.

When a Salesforce Function is invoked using the Apex `functions.Function` invoke methods, a FunctionInvocationRequest record is created that contains information on the status and results of the invocation.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `undelete()`, `update()`

Fields

Field	Details
`ExecutionTime`	**Type** int **Properties** Filter, Group, Nillable, Sort, Update **Description** The execution time of the Function in milliseconds.
`ExtendedResponse`	**Type** textarea **Properties** Nillable, Update **Description** JSON object with additional information about the result of the Function execution.
`FunctionName`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** Name of the Function that was invoked.
`OwnerId`	**Type** reference **Properties** Filter, Group, Sort, Update **Description** The owner of the FunctionInvocationRequest.
`ResponseBody`	**Type** base64 **Properties** Nillable, Update

Field	Details
	Description Response body of the invoked Function.
ResponseContentType	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Content type of the response body of the invoked Function. For example, the content type could be `application/json`, `text/csv`, or various other values depending on what the Function returned.
ResponseLength	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Length of the response body.
ResponseName	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** Name of response, not currently used.
ResponseUncompressedLength	**Type** int **Properties** Filter, Group, Nillable, Sort, Update **Description** Uncompressed length of the Function response, if the response content was compressed.
StackTrace	**Type** textarea **Properties** Nillable, Update **Description** If there was an error invoking the function, this field contains the Function stack trace.
Status	**Type** picklist

Field	Details
	Properties Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Status of the invoked Function. Functions that are invoked asynchronously can be in a queued `InProgress` state before they are invoked. Possible values are: • `Dispatched` • `Error` • `InProgress` • `New` • `RemoteConsumed` • `RemoteProduced` • `Success`

Usage

Treat FunctionInvocationRequest records as read-only records used to get information about a specific Function invocation. To invoke Functions, use the Apex `functions.Function` class invoke methods.

GtwyProvPaymentMethodType

The gateway provider payment method type allows integrators and payment providers to choose an active payment to receive an order's payment data rather than allowing the Salesforce Order Management platform to select a default payment method. This object is available in API version 50.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Fields

Field	Details
`Comments`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Users can provide additional details about the gateway provider payment method type record. Supports a maximum of 1000 characters.

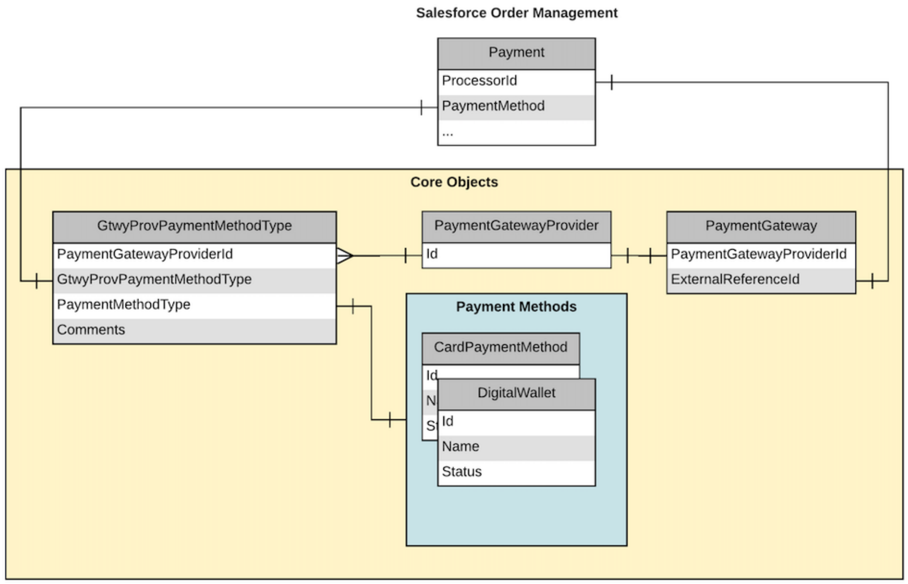
Field	Details
DeveloperName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, Salesforce generates one for each record, which slows performance.
GtwyProviderPaymentMethodType	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Links the Salesforce payment method to the payment method used in the Salesforce Order Management storefront. Your payment gateway integration uses this field when finding a payment method to link to a payment. The value of `GtwyProviderPaymentMethodType` must match the payment method value sent to the order's Payment Instrument in Salesforce Order Management. Listed below are several examples of payment method values that Salesforce could receive from Salesforce Order Management. • `CREDIT_CARD` • `BASIC_CREDIT` • `CreditCard` • `GooglePay` • `ApplePay`
Language	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Language of the payment gateway integration.

Field	Details
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (LastReferencedDate) but not viewed it.
MasterLabel	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. The gateway provider payment method type name that appears in the user interface.
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Namespace of the payment gateway integration classes.
PaymentGatewayProviderId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Specifies the payment gateway provider that Salesforce Order Management should use when processing payments. One payment gateway provider can be related to multiple payment method types. This is a relationship field. **Relationship Name** PaymentGatewayProvider **Relationship Type** Lookup **Refers To** PaymentGatewayProvider
PaymentMethodType	**Type** picklist

Field	Details
	Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Specifies the type of payment method used on an order in Salesforce Order Management. Possible values are: • `AlternativePaymentMethod` • `CardPaymentMethod` • `DigitalWallet`
`RecordTypeId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the record type entity related to the gateway provider payment method type. This is a relationship field. **Relationship Name** RecordType **Relationship Type** Lookup **Refers To** RecordType

Usage

The Salesforce Order Management payment record must have a `ProcessorId` field with the same value as the payment gateway's `ExternalReferenceId` field. The gateway provider payment method type record must have a `PaymentMethodType` field that looks up to the payment method that you want to associate to your payment. Finally, the payment gateway and gateway provider payment method type must have matching `PaymentGatewayProviderId` fields. When you've established these relationships, the payment record can infer your payment method from the gateway provider payment method type record.



Goal

The Goal object represents the components of a goal such as its name, description, and status.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`CompletionDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The completion date of the goal.
`Description`	**Type** textarea **Properties** Create, Nillable, Update

Field Name	Details
	Description The description of the goal. The maximum length is 65,535 characters.
DueDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date the goal is due.
ImageUrl	**Type** url **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The URL for the goal image. The image must be stored in Documents and set as externally available. Applicable only to Goal objects of `Type`: Goal.
IsKeyCompanyGoal	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the goal is a key company goal.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp that indicates when a user last viewed a record that is related to this goal.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp that indicates when a user last viewed this goal. If this value is null, this record might have been only referenced (`LastReferencedDate`) and not viewed.

Field Name	Details
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the goal. The maximum length is 255 characters.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the user who owns the goal.
Progress	**Type** percent **Properties** Filter, Nillable, Sort **Description** The progress of the goal measured as a percentage.
StartDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The start date of the goal.
Status	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The status of the goal. Possible values: • Draft • Published • Completed • Canceled • Not Completed

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

GoalFeed
: Feed tracking is available for the object.

GoalHistory
: History is available for tracked fields of the object.

GoalOwnerSharingRule
: Sharing rules are available for the object.

GoalShare
: Sharing is available for the object.

GoalLink

Represents the relationship between two goals. This is a many-to-many relationship, meaning that each goal can link to many other goals.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** The auto-generated name of the goal link.
`ParentGoalId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the parent goal.
`SubgoalId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort, Update **Description** The ID of the subgoal.

GoogleDoc

Represents a link to a Google Document. This object is available in API version 14.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is available in **All** Editions except **Database.com** for Google Apps Premier Edition accounts. See the Salesforce online help for more information.

Fields

Field	Details
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the Google document.
`Owner`	**Type** reference **Properties** Create, Defaulted on create, Filter, Nillable, Update **Description** The ID of the user who currently owns this Google Document. Default value is the user logged in to the API to perform the create.
`ParentId`	**Type** reference

Field	Details
	Properties Create, Filter **Description** Required. ID of the attachment's parent object. The following objects are supported as parents of Google documents: Account, Asset, Campaign, Case, Contact, Contract, Custom Object Behavior, Lead, Opportunity, Product2, and Solution.
`Url`	**Type** string **Properties** Create, Filter, Nillable, Update **Description** The URL of the Google document.

Group

A set of User records.

Groups are sets of users. They can contain individual users, other groups, the users in a particular role or territory, or the users in a particular role or territory plus all the users below that role or territory in the hierarchy.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `search()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Spring '20 and later, only authenticated internal and external users can access this object.

Fields

Field	Details
`DefaultDivision`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** This record's default division. Only applicable if divisions are enabled.

Field	Details
DeveloperName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. This name is unique by group type and corresponds to **Group Name** in the user interface. This field is available in API version 24.0 and later. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
DoesIncludeBosses	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the managers have access (`true`) or do not have access (`false`) to records shared with members of the group. This field is only available for public groups. This field is available in API version 18.0 and later.
DoesSendEmailToMembers	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the email is sent (`true`) or not sent (`false`) to the group members. The email is sent to queue members as well.
Email	**Type** email **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Email address for a group of type Case. Applies only for a case queue.

Field	Details
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. Name of the group. Corresponds to **Label** on the user interface.
OwnerId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user who owns the group.
QueueRoutingConfig	**Type** reference **Properties** Create, Delete, Query, Retrieve, Update **Description** The ID of the queue routing configuration associated with the queue.
RelatedId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Represents the ID of the associated groups. For groups of type "Role," the ID of the associated UserRole. The `RelatedId` field is polymorphic.
Type	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** Required. Type of the group. One of the following values: • `AllCustomerPortal`—Public group that includes all Customer Portal or Customer Community Plus users. This type is only available when a Customer Portal or a Customer Site is enabled for your org. • `ChannelProgramGroup`—Public group for partners in a channel program. • `CollaborationGroup`—Chatter group.

Field	Details
	• `Manager`—Public group that includes a user's direct and indirect managers. This group is read-only. • `ManagerAndSubordinatesInternal`—Public group that includes a user and the user's direct and indirect reports. This group is read-only. • `Organization`—Public group that includes all the User records in the organization. This group is read-only. • `Participant`—Compliant Data Sharing group that includes internal users who have the Use Compliant Data Sharing permission. A group can contain other participant groups only, or a group can contain both internal users with the Use Compliant Data Sharing permission and other participant groups. This value is only available when Compliant Data Sharing is enabled for your org. • `PRMOrganization`—Public group that includes all the partners in an organization that has the partner site or portal feature enabled. • `Queue`—Public group that includes all the User records that are members of a queue. • `Regular`—Standard public group. When you `create()` a group, its type must be `Regular`, unless a partner site or portal is enabled for the organization, in which case the type can be `Regular` or `PRMOrganization`. • `Role`—Public group that includes all the User records in a particular UserRole. • `RoleAndSubordinates`—Public group that includes all the User records in a particular UserRole and all the User records in any subordinate UserRole. • `RoleAndSubordinatesInternal`—Public group that includes all the User records in an internal UserRole, excluding customer and partner roles, and all the User records in any subordinate internal UserRole. • `Territory`—Public group that includes all the User records in an organization that has the territory feature enabled. • `TerritoryAndSubordinates`—Public group that includes all the User records in a particular UserRole and all the User records in any subordinateUserRole in an organization that has the territory feature enabled. Only `Personal`, `Regular`, and `Queue` can be used when creating a group. The other values are reserved.

Usage

Unlike users, this object can be deleted.

Only public groups are accessible via the API. Personal groups are not available.

In API version 34.0 and later, you can query a group using `Related.Name` to retrieve the group's name. `Related.Name` is supported for public groups, user roles, territories, manager groups, and user names.

In API version 13.0 and later, if you delete a public group, it is deleted even if it has been used in sharing, consistent with the behavior for UserRole. In versions before 13.0, such sharing prevents the record from being deleted.

SEE ALSO:
- GroupMember
- Object Basics

GroupMember

Represents a User or Group that is a member of a public group.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the Group.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the User or Group that is a direct member of the group.

Usage

A record exists for every User or Group who is a direct member of a public group whose `Type` field is set to Regular. User records that are indirect members of Regular public groups are not listed as group members. A User can be an indirect member of a group if he or she is in a UserRole above the direct group member in the hierarchy, or if he or she is a member of a group that is included as a subgroup in that group.

If you attempt to create a record that matches an existing record, system simply returns the existing record.

SEE ALSO:

Object Basics

GuestBuyerProfile

Represents a store's guest buyer profile, which allows unauthenticated buyers to browse the store. This object is available in API version 51.0 and later.

Supported Calls

`describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`

Fields

Field	Details
`CurrencyIsoCode`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Currency displayed to the guest buyer when they're viewing the store. Possible values are: • `USD`—U.S. Dollar
`Description`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Detailed description of the profile. Includes information like which store the profile is used in.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The last date and time when one or more of the fields were modified

Field	Details
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The last date and time when one or more of the fields were viewed
Name	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The name of the guest buyer profile. Including a reference to the store helps with later identification.

HashtagDefinition

HashtagDefinition represents hashtag (#) topics in public Chatter posts and comments. Public posts and comments include those on profiles and in public groups, but not those on records or in private groups. This object is available in API version 26.0 and later.

Important: Starting in Spring '16, API access to HashtagDefinition is disabled across all API versions. Any integrations relying on API queries to this object stop working. You can continue to use hashtags in posts and comments, and the hashtags continue to create corresponding topics. We recommend that you redirect all API queries and reports using the HashtagDefinition object to use the Topic object instead. For more information, see Retiring the Legacy HashtagDefinition Object—FAQs.

Supported Calls

delete(), describeSObjects(), getDeleted(), getUpdated(), query(), retrieve()

Fields

Field Name	Details
HashtagCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of times a hashtag topic is used.

Field Name	Details
Name	**Type** string **Properties** Filter, Nillable, Sort **Description** The string of characters following the hashtag (#) in a hashtag topic.
NameNorm	**Type** string **Properties** Filter, Nillable, Sort **Description** The string of characters following the hashtag (#) in a hashtag topic, normalized to remove capitalization and punctuation.
NetworkId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Identifier of the community to which the HashtagDefinition belongs. This field is available only if digital experiences is enabled in your org.

Usage

Use this object to identify public hashtag topics and see how often they're used.

SEE ALSO:

Topic

HealthCareDiagnosis

Represents information related to industry-standard healthcare diagnosis codes.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
Category	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** Indicates the category for this diagnosis such as newborn, pediatric, maternity, or adult.
Code	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Industry-standard diagnosis code.
CodeDescription	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of the diagnosis code.
CodeType	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** Type of diagnosis code represented in the record such as ICD-9 or ICD-10.
EffectiveDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Start date for the code.
EndDate	**Type** date

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** End date for the code.
Gender	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** Indicates whether this diagnosis is for males, females, or all genders.
IsActive	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the diagnosis code is available for use.
IsComplicationOrComorbidity	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this diagnosis is used to represent a complication or comorbidity.
IsHospitalAcquiredCondition	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this diagnosis represents a condition acquired while in the hospital.
IsMajorComplicationOrComorbidity	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field Name	Details
	Description Indicates whether this diagnosis is used to represent a major complication or comorbidity.
IsPresentOnAdmissionExempt	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether diagnosis code is exempt from the diagnosis present on admission requirement.
IsPrimaryDiagnosis	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether diagnosis code can be used as primary diagnosis only, or can be used in any diagnosis sequence.
IsUnacceptablePrincipalDxIpAdmit	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether diagnosis code is an unacceptable principal diagnosis for inpatient admission per Medicare Code Edits.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort

Field Name	Details
	Description The timestamp for when the current user last viewed this record. If this value is null, it's possible that this record was referenced (LastReferencedDate) and not viewed.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the code that displays in search and lookup fields. Salesforce recommends using the code along with the description to populate this field. For example, use <Code>: <Description> or <Code>-<Description> such as (E08.37X9 - Diabetes mellitus due to underlying condition).
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the user who owns this record.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

HealthCareDiagnosisHistory
History is available for tracked fields of the object.

HealthCareDiagnosisOwnerSharingRule
Sharing rules are available for the object.

HealthCareDiagnosisShare
Sharing is available for the object.

HealthCareProcedure

Represents information related to industry-standard healthcare procedure codes.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
Category	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** Category of the procedure code such as anesthesia, surgery, radiology, and so on.
Code	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Industry standard procedure code such as CPT or HCPCS.
CodeDescription	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of the procedure code.
CodeShortDescription	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Short description of the procedure code.
CodeType	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** Type of procedure code represented in the record such as CPT or HCPCS.
EffectiveDate	**Type** date

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** Start date for the code.
EndDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** End date for the code.
IsActive	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the diagnosis code is available for use.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, it's possible that this record was referenced (LastReferencedDate) and not viewed.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update

Field Name	Details
	Description The name of the code that displays in search and lookup fields. Salesforce recommends using the code along with the description to populate this field. For example, use <Code>: <Description> or <Code>-<Description> such as 95115: Allergy injection.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the user who owns this record.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

HealthCareProcedureHistory
History is available for tracked fields of the object.

HealthCareProcedureOwnerSharingRule
Sharing rules are available for the object.

HealthCareProcedureShare
Sharing is available for the object.

Holiday

Represents a period of time during which your customer support team is unavailable. Business hours and escalation rules associated with business hours are suspended during any holidays with which they are affiliated.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

All users, even those without the "View Setup and Configuration" user permission, can view holidays via the API.

Fields

Field	Details
`ActivityDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** If the Holiday `IsAllDay` flag is set to `true` (indicating that it is an all-day holiday), then the holiday due date information is contained in the `ActivityDate` field. This field is a date field with a timestamp that is always set to midnight in the Coordinated Universal Time (UTC) time zone. The timestamp is not relevant, and you should not attempt to alter it to account for any time zone differences.
`Description`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Text description of the holiday.
`EndTimeInMinutes`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The end time of the holiday in minutes.
`IsAllDay`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the duration of the holiday is all day (`true`) or not (`false`).
`IsRecurrence`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the holiday is scheduled to repeat itself (`true`) or only occurs once (`false`). This is a read only field on update, but not on create. If this field value is `true`, then any recurrence fields associated with the given recurrence type must be populated.

Field	Details
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the holiday.
RecurrenceDayOfMonth	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The day of the month on which the holiday repeats.
RecurrenceDayOfWeekMask	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The day or days of the week on which the holiday repeats. This field contains a bitmask. For each day of the week, the values are as follows: • Sunday = 1 • Monday = 2 • Tuesday = 4 • Wednesday = 8 • Thursday = 16 • Friday = 32 • Saturday = 64 Multiple days are represented as the sum of their numerical values. For example, Tuesday and Thursday = 4 + 16 = 20.
RecurrenceEndDateOnly	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The last date on which the holiday repeats. For multiday recurring events, this is the day on which the last occurrence starts.
RecurrenceInstance	**Type** picklist

Field	Details
	Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The frequency of the recurring holiday. For example, `2nd` or `3rd`.
`RecurrenceInterval`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The interval between recurring holidays.
`RecurrenceMonthOfYear`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The month of the year on which the event repeats.
`RecurrenceStartDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date when the recurring holiday begins. Must be a date and time before `RecurrenceEndDateOnly`.
`RecurrenceType`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates how often the holiday repeats. For example, daily, weekly, or every Nth month (where “Nth” is defined in `RecurrenceInstance`).
`StartTimeInMinutes`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The start time of the holiday in minutes.

Usage

Use this object to view and update holidays, which specify dates and times at which associated business hours and escalation rules are suspended.

IconDefinition

Represents the icon-related metadata for a custom tab. This object is available in API version 43.0 and later.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field Name	Details
`ContentType`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The tab icon's content type, for example, "image/png."
`DurableId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A unique virtual Salesforce ID for the icon.
`Height`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The tab icon's height in pixels. If the icon content type is an SVG type, height and width values are not used.
`TabDefinitionId`	**Type** string **Properties** Filter, Nillable, Sort

Field Name	Details
	Description The `TabDefinition` ID.
`Theme`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The icon's theme.
`Url`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The fully qualified URL for this icon.
`Width`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The tab icon's width in pixels. If the icon content type is an SVG type, height and width values are not used.

Idea

Represents an idea on which users are allowed to comment and vote, for example, a suggestion for an enhancement to an existing product or process. This object is available in API version 12 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Note: For other standard objects, the `describeLayout()` call returns the `recordTypeMappings` section that contains the layout ID and picklist values for each record type. However, the `recordTypeMappings` section and the fields it includes are not available for the Idea object.

When performing a SOSL search on Idea objects, IdeaComment objects are also searched.

Fields

Field	Details
AttachmentBody	**Type** base64 **Properties** Create, Nillable, Update **Description** File data for the attachment. This field is available in API version 28.0 and later.
AttachmentContentType	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Type of the attachment. This field is available in API version 28.0 and later.
AttachmentLength	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Size of the attachment in bytes. This field is available in API version 28.0 and later.
AttachmentName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Name of the attachment. This field is available in API version 28.0 and later.
Body	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of the Idea.
Categories	**Type** multipicklist

Field	Details
	Properties Create, Filter, Nillable, Update **Description** Customizable multi-select picklist used to organize Ideas into logical groupings. Note: This field is only available if your organization has the `Categories` field enabled. This field is enabled by default in organizations created after API version 14 was released. If the `Categories` field is enabled, API versions 13 and earlier do not have access to either the `Categories` or `Category` fields.
`Category`	**Type** picklist **Properties** Create, Filter, Nillable, Update **Description** Customizable picklist of values used to organize Ideas into logical groupings. Note: This field is not available if your organization has the multi-select `Categories` field enabled.
`CommunityId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The zone ID associated with the idea. Once you create an idea, you can't change the zone ID associated with that idea. Note: API version 12 does not support zone ID. If you create an idea in version 12, your idea is automatically posted to the oldest zone that you have permission to access.
`CreatorFullPhotoUrl`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the user's profile photo. This field is available in API version 28.0 and later.
`CreatorName`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description Name of the user who posted the idea or commented on the idea. This field is available in API version 28.0 and later.
`CreatorSmallPhotoUrl`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the user's thumbnail photo. This field is available in API version 28.0 and later.
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization.
`IdeaThemeID`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Identifies the idea theme associated with the idea.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`IsHtml`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field	Details
	Description Read-only. If this value is `true`, your organization has the Ideas HTML editor enabled, and the Idea `Body` may contain HTML. If this value is `false`, the HTML editor is disabled and the Idea `Body` only contains regular text.
`IsMerged`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Read only. Indicates whether the idea has been merged with a parent idea (`true`) or not (`false`). You can't vote for or add comments to a merged idea. Note: In API version 27, `IsMerged` replaces `IsLocked`. Existing formula fields that use `IsLocked` must be edited to use `IsMerged`.
`LastCommentDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time the last comment (child IdeaComment object) was added.
`LastCommentId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Read only. The ID of the last comment (child IdeaComment object).
`LastReferencedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update

Field	Details
	Description The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`NumComments`	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** The number of comments (child IdeaComment objects) that users have submitted for the given idea.
`ParentIdeaId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID associated with this idea's parent idea. When multiple ideas are merged together, one idea becomes the parent (master) of the other ideas. The `ParentIdeaId` is automatically set when you merge ideas.
`RecordTypeId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the record type assigned to this object.
`Status`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Customizable picklist of values used to specify the status of an idea.
`Title`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The descriptive title of the idea.

Field	Details
VoteScore	**Type** double **Properties** Filter, Nillable, Sort **Description** The internal score of the Idea, used to sort Ideas on the Popular tab in the application user interface. The internal algorithm that determines the score gives older votes less weight than newer votes, simulating exponential decay. The score itself does not display in the application user interface. Note: Unlike other fields of type double, you can't use a SOQL aggregate function with this field.
VoteTotal	**Type** double **Properties** Filter, Nillable, Sort **Description** An Idea's total number of points. Each vote a user makes is worth ten points, therefore the value of this field is ten times the number of votes an idea has received. Note: Unlike other fields of type double, you can't use a SOQL aggregate function with this field.

Note: If you are importing Idea data and need to set the value for an audit field, such as `CreatedDate`, contact Salesforce. Audit fields are automatically updated during API operations unless you request to set these fields yourself..

Usage

Use this object to track ideas, which are written suggestions on which users can vote and comment.

SEE ALSO:

IdeaComment

Vote

IdeaComment

Represents a comment that a user has submitted in response to an idea.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Note: When performing a SOSL search on IdeaComment objects, Idea objects are also searched.

Fields

Field	Field Type
`CommentBody`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Body of the submitted comment.
`CommunityId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The zone ID associated with the idea. Once you create an idea, you can't change the zone ID associated with that idea. Note: API version 12 does not support zone ID. If you create an idea in version 12, your idea is automatically posted to the oldest zone that you have permission to access.
`CreatorFullPhotoUrl`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the user's profile photo. This field is available in API version 28.0 and later.
`CreatorName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of the user who posted the idea or commented on the idea. This field is available in API version 28.0 and later.

Field	Field Type
CreatorSmallPhotoUrl	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the user's thumbnail photo. This field is available in API version 28.0 and later.
IdeaId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the idea on which this comment was made.
IsHtml	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Read-only. If this value is `true`, your organization has the Ideas HTML editor enabled, and the `CommentBody` field may contain HTML. If this value is `false`, the HTML editor is disabled and the `CommentBody` field only contains regular text.
UpVotes	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Total number of up votes for the question.

Note: If you import these records, and need to set the value for an audit field, such as `CreatedDate`, contact Salesforce. Audit fields are automatically updated during API operations unless you request to set these fields yourself.

Usage

Use this object to track comments on ideas, which are users' text responses to ideas.

SEE ALSO:

Idea

Vote

IdeaReputation

Represents a collection of statistics and scores derived from a user's activity within an Ideas zone or internal organization. This object is available in API version 28.0 and later.

Supported Calls

`query()`, `retrieve()`,

Fields

Field	Details
`CommentCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of comments a user has created in a zone or the internal organization. This number excludes comments the user creates on his or her own idea.
`CommentsReceivedCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of comments a user has received in a zone or the internal organization.
`ContextId`	**Type** reference **Properties** Filter, Group, Namepointing, Nillable, Sort **Description** The ID of the zone or internal organization.
`DownVotesGivenCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of down votes a user has given in a zone or the internal organization.

Field	Details
DownVotesReceivedCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of down votes a user has received in a zone or the internal organization.
IdeaCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of ideas a user has created in a zone or the internal organization.
ReputationLevel	**Type** string **Properties** Nillable **Description** The reputation level that a user has achieved based on their score in a zone or within an organization.
Score	**Type** double **Properties** Filter, Nillable, Sort **Description** The total score of a user's activity within a zone or within an organization.
UpVotesGivenCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of up votes a user has given in a zone or the internal organization. This number doesn't include the default vote the system applies when the user creates the idea.
UpVotesReceivedCount	**Type** int **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The number of up votes a user has received in a zone or the internal organization.
`UserId`	**Type** reference **Properties** Filter, Group, Sort **Description** The user ID associated with the reputation.

Usage

Use to query a user's reputation within a zone.

IdeaReputationLevel

Represents a reputation level within an Ideas zone or internal organization and is used by the system to calculate reputation. You can create up to 25 levels per zone or internal organization. This object is available in API version 28.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`ContextId`	**Type** reference **Properties** Create, Filter, Group, Namepointing, Sort, Update **Description** The ID of the zone or internal organization.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update

Field Name	Details
	Description Name of the reputation level. The name must be unique within the zone or internal organization. Maximum size is 50 characters.
`Threshold`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** Minimum number of points for this level. The threshold must be unique within the zone or internal organization and must be greater than or equal to zero.

Usage

Use to create or edit reputation levels for an Ideas zone or internal organization.

IdeaTheme

Represents an invitation to zone members to submit ideas that are focused on a specific topic. This object is available in API version 26 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`,

Fields

Field Name	Details
`Categories`	**Type** multipicklist **Properties** Create, Filter, Nillable, Update **Description** Customizable multi-select picklist used to organize ideas and idea themes into logical groupings.
`CommunityId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, **Description** The zone ID associated with the idea theme.
CurrencyIsoCode	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of the idea theme.
EndDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Date marking the end of the idea theme.
LastReferencedDate	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.
StartDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Date that the idea theme begins.

Field Name	Details
Status	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** Customizable picklist of values used to specify the status of the idea theme.
Title	**Type** string **Properties** Create, Filter, Group, idLookup, Namefield, Sort, Update **Description** Title of the idea theme.

Usage

Use the object to track ideas that are submitted to an idea theme.

IdpEventLog

Represents the Identity Provider Event Log. This log records both problems and successes with inbound SAML or OpenID Connect authentication requests from another app provider. It also records outbound SAML responses when Salesforce is acting as an identity provider. This object is available in API version 39.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
AppId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the app provider seeking authentication.

Field	Details
AuthSessionId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the authentication session.
ErrorCode	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The error code for the authentication issue. Possible values are: • AppAccessDenied—Error: App access denied • AppBlocked—Error: App blocked • ClientUnapproved—Error: Invalid grant • CodeExpired—Error: Expired authorization code • InternalError—Error: Internal Error • InvalidAuthnRequest—Error: Unable to parse AuthnRequest from service provider • InvalidClientCredentials—Error: Invalid client credentials • InvalidCode—Error: Invalid authorization code • InvalidDeviceId—Error: Invalid device ID • InvalidIdpEndpoint—Error: Invalid Identity Provider Endpoint URL • InvalidIssuer—Error: Invalid Issuer • InvalidScope—Error: Invalid scope(s) • InvalidSessionLevel—Error: Invalid session level • InvalidSettings—Error: IdP certificate is invalid or does not exist • InvalidSignature—Error: Invalid Signature • InvalidSp—Error: Misconfigured or invalid service provider • InvalidSpokeSp—Error: Invalid spoke SP settings • InvalidUserCredentials—Error: Invalid user credentials • NoAccess—Error: User does not have access to this service provider • NoCustomAttrValue—Error: User does not have a value for the subject custom attribute • NoCustomField—Error: Custom field not found • NoSpokeId—Error: No Spoke ID found • NoSubdomain—Error: Org has not configured My Domains yet

Field	Details
	• `NoUserFedId`—Error: User does not have a Federation Identifier selected • `OauthError`—OAuth Error • `Success` • `UnableToResolve`—Error: Unable to resolve request into a Service Provider • `UnknownError`—Unknown Error
`IdentityUsed`	**Type** string **Properties** Filter, Nillable, Sort **Description** The identity (username) of the user being authenticated.
`InitiatedBy`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The code describing how the authentication request was initiated. Possible values are: • `IdP`—IdP-Initiated SAML • `OauthAuthorize`—OAuth Authorization • `OauthTokenExchange`—OAuth Token Exchange • `SP`—SP-Initiated SAML
`OptionsHasLogoutUrl`	**Type** boolean **Properties** Filter **Description** Whether a logout URL has been assigned to the app. This URL is where users are redirected when they log out.
`SamlEntityUrl`	**Type** string **Properties** Filter, Sort **Description** The authentication URL of the SAML provider.

Field	Details
`SsoType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of SSO. Options are: • 0–SAML • 1–OpenID Connect
`Timestamp`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time on which the event occurred.
`UserId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the user seeking authentication.

IframeWhiteListUrl

Represents a list of trusted external domains that you allow to frame your Embedded Service, Surveys, and Visualforce pages. This object is available in API version 45.0 and later.

Important: Where possible, we changed noninclusive terms to align with our company value of Equality. Because changing terms in our code can break current implementations, we maintained this object's name.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`Context`	**Type** picklist

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of content in the iframe. Valid values are: • `EmbeddedService`—Available in API version 51.0 and later. • `Surveys` • `VisualforcePages`
`Url`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The unique domain that is allowed to frame your Visualforce pages and surveys. Accepts these formats: example.com, *example.com, and http://example.com.

Usage

To use this object for framing Visualforce pages, on Session Settings in Setup, select **Enable clickjack protection for customer Visualforce pages** either **with headers disabled** or **with standard headers**. These options both allow framing of Visualforce pages on trusted external domains and provide clickjack protection.

Alternatively, you can customize session settings via the SecuritySettings Metadata API type. To use the IframeWhiteListUrl object, set either the `enableClickjackNonsetupUser` or `enableClickjackNonsetupUserHeaderless` field to `true`. For more information, see SecuritySettings in the Metadata API Developer Guide.

Image

Represents the details of an image. This object is available in API version 47.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`AlternateText`	**Type** string

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** Accessibility text to explain the image in words.
`CapturedAngle`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Angle at which the image was captured.
`ContentDocumentId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Unique identifier of the content document where image is stored.
`ImageClass`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The image category. Possible values are: • `FOOD` • `LOGOS` • `OBJECTS` • `SCENES`
`ImageClassObjectType`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The type of image. Used in Einstein Object Detection to identify whether the image is used to detect objects or build a model. Possible values are: • `DETECTION`—Actual Image

Field	Details
	• `FEEDBACK` • `TRAINING`
`ImageViewType`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Orientation of the image.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates if an image is active. The default value is False. An active image can be used for building or updating a model in Einstein Object Detection.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date on which the image was last referenced.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date on which the image was last viewed.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Nillable, Sort, Update **Description** Name of the record.
`OwnerId`	**Type** reference

Field	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** Unique identifier of the record owner.
`Title`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Title of the image.
`Url`	**Type** url **Properties** Create, Filter, Nillable, Sort, Update **Description** Public URL of the image file.

Individual

Represents a customer's data privacy and protection preferences. Data privacy records based on the Individual object store your customers' preferences. Data privacy records are associated with related leads, contacts, person accounts, and users. This object is available in API version 42.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `merge()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

- This object is available if Data Protection and Privacy is enabled.

Fields

Field Name	Details
`BirthDate`	**Type** date

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The customer’s birthdate.
CanStorePiiElsewhere	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indication that you can store the customer’s personally identifiable information (PII) outside of their legislation area. For example, you could store an EU citizen’s PII data in the US.
ChildrenCount	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The number of children the customer has.
ConsumerCreditScore	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The person's credit score (for example, 740).
ConsumerCreditScoreProviderName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The name of the company that provided the credit score.
ConvictionsCount	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The number of convictions for the customer.

Field Name	Details
DeathDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The customer's death date.
FirstName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The customer's first name. Maximum size is 40 characters.
HasOptedOutGeoTracking	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Preference to not track geolocation on mobile devices.
HasOptedOutProcessing	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Preference to not process personal data, which can include collecting, storing, and sharing personal data.
HasOptedOutProfiling	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Preference to not process data for predicting personal attributes, such as interests, behavior, and location.
HasOptedOutSolicit	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field Name	Details
	Description Preference to not solicit products and services.
HasOptedOutTracking	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Preference to not track customer web activity and whether the customer opens email sent through Salesforce.
IndividualsAge	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates whether the customer is considered to be a minor.
InfluencerRating	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A measure of the person's influence, irrespective of how we do business with them.
IsHomeOwner	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the customer owns a home.
LastName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. The customer’s last name. Maximum size is 80 characters.
LastViewedDate	**Type** dateTime

Field Name	Details
	Properties Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record.
MasterRecordId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** If this object was deleted as the result of a merge, this field contains the ID of the record that was kept. If this object was deleted for any other reason, or hasn’t been deleted, the value is `null`.
MilitaryService	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates whether the customer has served in the military.
Name	**Type** string **Properties** Filter, Group, Sort **Description** Concatenation of `FirstName` and `LastName`. Maximum size is 203 characters, including whitespaces.
Occupation	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The customer’s occupation. Maximum size is 150 characters.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the owner of the account associated with this customer.

Field Name	Details
Salutation	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The title for addressing the customer, such as Dr. or Mrs.
SendIndividualData	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Preference to export personal data for delivery to the customer.
ShouldForget	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Preference to delete records and personal data related to this customer.
Website	**Type** url **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The URL for the customer's website.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

IndividualHistory
History is available for tracked fields of the object.

IndividualShare
Sharing is available for the object.

IndividualHistory

Represents the history of changes to values in the fields of a data privacy record, based on the Individual object. This object is available in versions 42.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Special Access Rules

- This object is available if Data Protection and Privacy is enabled.
- The Individual object isn't available to Customer Community, Partner Community, and Customer Portal users.

Fields

Field Name	Details
`DataType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Data type of the field that was changed.
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the changed field.
`IndividualId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the data privacy record. Label is **Individual ID**.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The updated value of the changed field.
`OldValue`	**Type** anyType

Field Name	Details
	Properties Nillable, Sort **Description** The previous value of the changed field.

Usage

Use this object to identify changes to data privacy records.

This object respects field-level security on the parent object.

IndividualShare

Represents a list of access levels to a data privacy record along with an explanation of the access level. For example, if you have access to a record because you own it, the `IndividualAccessLevel` is `All` and `RowCause` is Owner. This object is available in API version 42.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- This object is available if Data Protection and Privacy is enabled.
- The Individual object isn't available to Customer Community, Partner Community, and Customer Portal users.

Fields

Field Name	Details
`IndividualAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the user or group has to the data privacy record. The possible values include: • `Read` • `Edit` • `All` (Except for create or update.)

Field Name	Details
	Set this field to an access level that's higher than your default access level for individuals.
IndividualId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the Individual associated with this sharing entry. This field isn't available for updates.
RowCause	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. Write to this field when its value is omitted or set to `Manual` (default). We give you some of the many possible values, including: • `Manual`—The User or Group has access because a user with "All" access manually shared the data privacy record with them. • `Owner`—The User is the owner of the data privacy record. • `Rule`—The User or Group has access to the data privacy record via an Individual sharing rule. • `LpuImplicit`—The User has access to records owned by high-volume Experience Cloud site users via a share group.
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the User or Group that has been given access to the data privacy record. This field isn't available for updates.

Usage

This object lets you determine which users and groups can view or edit Individual records owned by other users.

InternalOrganizationUnit

Represents an organization that an Employee belongs to. This object is available in API version 48.0 and later. In API version 49.0 and later, this object supports reports, criteria-based sharing rules, and history tracking, plus you can exclude individual fields from custom page layouts.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

To access this object, you must be assigned a Workplace Command Center permission set license and the Provides access to Workplace Command Center features system permission.

Fields

Field	Details
`Description`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A description of the organization the Employee is working in.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
`OrganizationCode`	**Type** string

Field	Details
	Properties Create, Filter, Group, idLookup, Sort, Update **Description** Required. The code of the organization the Employee is working in.
OrganizationName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The name of the organization the Employee is working in.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the user who currently owns this record. Default value is the user logged in to the API to perform the create operation.
ParentOrganizationId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A reference to the parent organization.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

InternalOrganizationUnitHistory (API version 49.0)
History is available for tracked fields of the object.

InternalOrganizationUnitOwnerSharingRule
Sharing rules are available for the object.

InternalOrganizationUnitShare (API version 49.0)
Sharing is available for the object.

SEE ALSO:

Workplace Command Center for Work.com Developer Guide: Extend Work.com with Custom Solutions

Invoice

Represents a financial document describing the total amount a buyer must pay for goods or services provided. This object is available in API version 48.0 and later.

Users can edit non-posted invoices. Posted invoices can't be deleted. Once an invoice is posted, users can make payments against it to reduce its balance.

Supported Calls

`describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`

Special Access Rules

To access these entities, your org must have a Salesforce Order Management license. These entities are available only in Lightning Experience.

Fields

Field	Details
`Balance`	**Type** currency **Properties** Filter, Nillable, Sort **Description** The outstanding balance for this invoice. Equal to the invoice's total amount with tax, ignoring payments and adjustments.
`BillToContactId`	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** Inherited from the account's Bill to Account.
`BillingAccountId`	**Type** reference **Properties** Filter, Group, Sort, Update **Description** The customer account for this invoice.

Field	Details
`Description`	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** Users can add more information about this invoice. Maximum of 1000 characters.
`DocumentNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** System-generated number that is used to organize financial documents. Can be sequential or random.
`DueDate`	**Type** date **Properties** Filter, Group, Sort, Update **Description** The customer must pay the invoice by the due date. Unpaid invoices past the due date may be sent to collections.
`InvoiceDate`	**Type** date **Properties** Filter, Group, Sort, Update **Description** The date that the invoice was posted. Used with payment terms to determine the invoice's `DueDate`. For example, an invoice with an `InvoiceDate` of 04/01 and Net 30 payment terms would have a `DueDate` of 05/01.
`InvoiceNumber`	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** System-created unique ID for this invoice.
`OwnerId`	**Type** reference

Field	Details
	Properties Filter, Group, Sort, Update **Description** The user who owns an invoice record.
ReferenceEntityId	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** The ID of the order or order summary that created this invoice.
Status	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort, Update **Description** The state of the invoice. Possible values are: • `Canceled`: Reserved for future use. • `Draft`: Reserved for future use. • `ErrorPosting`: Reserved for future use. • `Pending`: Reserved for future use. • `Posted`: Reserved for future use.
TotalAdjustmentAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** The sum of the invoice's adjustment line amounts.
TotalAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** The sum `TotalAmount` values on the invoice's lines.
TotalAmountWithTax	**Type** currency

Field	Details
	Properties Filter, Nillable, Sort **Description** The sum of `TotalAmountWithTax` values on the invoice's lines.
`TotalChargeAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** The sum of the invoice's charges.
`TotalTaxAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** The sum of `TaxAmount` values on the invoice lines.

InvoiceLine

Represents the amount that a buyer must pay for a product, service, or fee. Invoice lines are created based on the amount of an order line. This object is available in API version 48.0 and later.

Supported Calls

`describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`

Special Access Rules

To access these entities, your org must have a Salesforce Order Management license. These entities are available only in Lightning Experience.

Fields

Field	Details
`AdjustmentAmount`	**Type** currency

Field	Details
	Properties Filter, Nillable, Sort **Description** Sum of adjustments made to the invoice line.
ChargeAmount	**Type** currency **Properties** Filter, Nillable, Sort, Update **Description** Sum of charges made to the invoice line.
Description	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** Description of the invoice line.
GroupReferenceEntityItemId	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** Grouping field for adjustment line items.
InvoiceId	**Type** reference **Properties** Filter, Group, Sort **Description** The invoice that contains this invoice line.
InvoiceLineEndDate	**Type** date **Properties** Filter, Group, Sort, Update **Description** For invoice lines made from a time-based service, the end date of the billing for the service.
InvoiceLineStartDate	**Type** date

Field	Details
	Properties Filter, Group, Sort, Update **Description** For invoice lines made from a time-based service, the first date of the billing for the service.
InvoiceStatus	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** State of the invoice line. Inherited from the invoice's status.
Name	**Type** string **Properties** Filter, Group, idLookup, Sort, Update **Description** Name of the invoice line.
Product2Id	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** The product that was charged or ordered to create the invoice line.
Quantity	**Type** double **Properties** Filter, Nillable, Sort, Update **Description** Number of units of the order product that created the invoice line.
ReferenceEntityItemId	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** The order item or adjustment item that created the invoice line.
ReferenceEntityItemType	**Type** picklist

Field	Details
	Properties Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The type of transaction that created the invoice line. Possible values are: • `DeliveryCharge` • `OrderProduct`
ReferenceEntityItemTypeCode	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The type of object that created the invoice line. Possible values are: • `Charge` • `Product`
RelatedLineId	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** The original invoice line that was adjusted or taxed.
TaxAmount	**Type** currency **Properties** Filter, Nillable, Sort, Update **Description** Total tax for the invoice line.
TaxCode	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** The code used to calculate tax rate for the invoice line.
TaxEffectiveDate	**Type** date

Field	Details
	Properties Filter, Group, Nillable, Sort, Update **Description** The date used to calculate the invoice line's `TaxAmount`.
`TaxName`	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** User-defined name for the applied tax.
`TaxRate`	**Type** percent **Properties** Filter, Nillable, Sort, Update **Description** Percentage value used for calculating tax.
`TotalAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** The total amount of the invoice line before any applicable tax.
`TotalAmountWithTax`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of tax for this invoice line, with tax included. Sum of `TotalAmount` and `TaxAmount`.
`Type`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Shows the type of transaction for the invoice line. Possible values are:

Field	Details
	• `Adjustment` • `Charge` • `Tax`
`UnitPrice`	**Type** currency **Properties** Filter, Nillable, Sort, Update **Description** Price for one unit of the item on the invoice line.

JobProfile

Represents a job profile used for shift scheduling. This object is available in API versions 47.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled in your org.

Fields

Field	Details
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time when the current user last viewed a related record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time when the current user last viewed this record.

Field	Details
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the job profile.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the owner of the job profile.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

JobProfileFeed
Feed tracking is available for the object.

JobProfileHistory
History is available for tracked fields of the object.

JobProfileOwnerSharingRule
Sharing rules are available for the object.

JobProfileShare
Sharing is available for the object.

Knowledge__Feed

Represents the feed for a knowledge article. This object is available in API version 39.0 and later.

For additional information about feeds, see FeedItem on page 1432.

Note: By default, the prefix for this object name is `Knowledge` and that is the value shown in this reference. However, this prefix can be modified by changing the **Object Name** for the Knowledge__kav object in Object Manager.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Lightning Knowledge must be enabled in your org.

Fields

Field	Details
BestCommentId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the comment marked as best answer on a question post.
Body	**Type** textarea **Properties** Nillable, Sort **Description** The body of the feed item. Required when `Type` is `TextPost` or `AdvancedTextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. Although a value for `Body` is not required for the `ContentPost` type, an attachment is required. If an attachment isn't present, the type changes to `TextPost` or `AdvancedTextPost`, depending on the API version. `TextPost` and `AdvancedTextPost` do require a value for `Body`. Tip: See the `IsRichText` field for a list of HTML tags supported in the body of rich text posts.
CommentCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of comments associated with this feed item. Tip: In a feed that supports pre-moderation, `CommentCount` isn't updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed, comments aren't counted until approved by an admin or someone with Can Approve Feed Post and Comment or Modify All Data. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until the end of comments is returned.
InsertedById	**Type** reference

Field	Details
	Properties Group, Nillable, Sort **Description** ID of the user who added this item to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the context user.
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. If you post a rich text feed comment using SOAP API, set `IsRichText` to `true` and escape HTML entities from the body. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<a>` • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only through the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort

Field	Details
	Description The number of likes associated with this feed item.
`LinkUrl`	**Type** url **Properties** Nillable, Sort **Description** The URL of a `LinkPost`.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the Knowledge article to which the feed item is related.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion record associated with a `ContentPost`. For WDC thanks posts, it's the ID of the WorkThanks object associated with a `RypplePost`. This field is typically null for all posts except `ContentPost` and `RypplePost`. For example, set this field to an existing ContentVersion ID and post it to a feed with `Type` set to `ContentPost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the `LinkUrl` is the URL and this field is the link name. The `Title` field can be updated on posts of `Type` `QuestionPost`.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort

Field	Details
	Description The type of feed item. Except for `ContentPost`, `LinkPost`, and `TextPost`, don't create feed items of other types directly from the API. • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in WDC. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `AttachArticleEvent`—generated event when a user attaches an article to a case. • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `CaseCommentPost`—generated event when a user adds a case comment for a case object.

Field	Details
	• `ChangeStatusPost`—generated event when a user changes the status of a case. • `ChatTranscriptPost`—generated event when Chat transcript is saved to a case. • `EmailMessageEvent`—generated event when an email related to a case object is sent or received. • `FacebookPost`—generated when a Facebook post is created from a case. Deprecated. • `MilestoneEvent`—generated when a case milestone is completed or reaches violation status. • `SocialPost`—generated when a social post is created from a case. Note: If you set `Type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.

Knowledge__ka

Provides access to the concrete object that represents a Knowledge article, the parent object for article versions. This object is available in API version 39.0 and later.

Note: By default, the prefix for this object name is `Knowledge` and that is the value shown in this reference. However, this prefix can be modified by changing the **Object Name** for the Knowledge__kav object in Object Manager.

This object is derived from KnowledgeArticle on page 1652.

Supported Calls

`delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `undelete()`

Special Access Rules

Lightning Knowledge must be enabled in your org. A user must have the View Articles permission enabled. Salesforce Knowledge users, unlike customer and partner users, must also be granted the `Knowledge User` feature license.

Fields

Field	Details
`ArchivedById`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the user who archived the article.

Field	Details
ArchivedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the article was archived.
ArticleNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The unique number automatically assigned to the article when it's created. You can't change the format or value for this field.
CaseAssociationCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of cases attached to the article.
FirstPublishedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the article was first published.
LastPublishedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the article was last published.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort

Field	Details
	Description The timestamp when the current user last accessed this record, a record related to this record, or a list view.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (LastReferencedDate) but not viewed it.
MasterLanguage	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The article's original language. Only accessible if your knowledge base supports multiple languages.
MigratedToFromArticle	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ID for the corresponding pre- or post-migration article. Contains values only in orgs that migrate from Knowledge in Salesforce Classic to Lightning Knowledge. This field is available in API version 45.0 and later.
TotalViewCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Total number of views for this article. This field is available in API version 39.0 and later.

Knowledge__kav

Provides access to the concrete object that represents a Knowledge article version. This object is available in API version 39.0 and later.

Note: By default, the prefix for this object name is `Knowledge` and that is the value shown in this reference. However, this prefix can be modified by changing the **Object Name** for the Knowledge__kav object in Object Manager.

This object is derived from KnowledgeArticleVersion on page 1655.

Supported Calls

`create()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

Lightning Knowledge must be enabled in your org. A user must have the View Articles permission enabled. Salesforce Knowledge users, unlike customer and partner users, must also be granted the `Knowledge User` feature license.

Fields

Field	Details
`ArchivedById`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the user who archived the article.
`ArchivedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date the article version was archived.
`ArticleArchivedById`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the user who archived the article.
`ArticleArchivedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort

Field	Details
	Description The date the article was archived.
`ArticleCaseAttachCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of cases where this article is attached.
`ArticleCreatedById`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the user who created the article.
`ArticleCreatedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date the article was created.
`ArticleMasterLanguage`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The article's original language. Only accessible if your knowledge base supports multiple languages.
`ArticleNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** The unique number automatically assigned to the article when it's created. You can't change the format or value for this field.
`ArticleTotalViewCount`	**Type** int

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** Total number of views for the article.
AssignedById	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the user who assigned the article.
AssignedToId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the user assigned to the article.
AssignmentDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date the article was assigned to a user.
AssignmentDueDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The due date when an article is assigned.
AssignmentNote	**Type** textarea **Properties** Filter, Nillable, Sort **Description** Notes to the assignee from the user who assigned the article.
FirstPublishedDate	**Type** dateTime

Field	Details
	Properties Filter, Nillable, Sort **Description** The date when the article was first published.
`IsLatestVersion`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the article is the most current version. (`true`) or not (`false`). This field can be `true` on the online or published version, a draft version in the master language, a draft version in a translation, and the latest archived version. However, you can’t filter by (PublishState=’Online’) and (IsLatestVersion=false) because the online version is also the latest version. This field is available in API version 24.0 and later.
`IsMasterLanguage`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the article has one or more translations associated with it (`true`) or not (`false`). Only accessible if your knowledge base supports multiple languages.
`IsOutOfDate`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the source article has been updated since this translated version was created (`true`) or not (`false`). Only accessible if your knowledge base supports multiple languages.
`IsVisibleInApp`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Required. Indicates whether the article is visible in the Articles tab (`true`) or not (`false`).
`IsVisibleInCsp`	**Type** boolean

Field	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** Required. Indicates whether the article is visible in the Customer Portal (`true`) or not (`false`).
`IsVisibleInPkb`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Required. Indicates whether the article is visible in the public knowledge base (`true`) or not (`false`).
`IsVisibleInPrm`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Required. Indicates whether the article is visible in the partner portal (`true`) or not (`false`).
`KnowledgeArticleId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the article independent from its version. The value for this field is retrieved from the `Id` field of the KnowledgeArticle object.
`Language`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The language that the article is written in, such as `French` or `Chinese (Traditional)`. Querying or searching articles in SOSL require that you specify the `Language` field in the WHERE clause. The language must be the same for all article types. Before API version 47.0, you must include the `Language` field to filter queries on Knowledge article versions. In API version 47.0 and later, you can filter queries on Knowledge article versions with or without `Language` depending on what you are querying.

Field	Details
LastPublishedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the article was last published.
MasterVersionId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the source article, if the article is the translation of a source article. Only accessible if your knowledge base supports multiple languages.
MigratedToFromArticleVersion	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ID for the corresponding pre- or post-migration article version. Contains values only in orgs that migrate from Classic to Lightning Knowledge. Available in API version 43.0 and later.
OwnerId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the article's owner.
PublishStatus	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The publication status for the article: • `Draft`: any draft articles. • `Online`: articles published in Salesforce Knowledge. • `Archived`: archived articles. A user must have the “Manage Articles” permission enabled to use `Online`.

Field	Details
	Article queries and searches in SOQL or SOSL require that you specify either the `PublishStatus` or the `Id` field in the WHERE clause. You can search for only one publication status per article type in a single SOSL query. When searching for articles with a `PublishStatus` of `Archived`, also check that `IsLatestVersion` equals `false` in your WHERE clause.
`RecordTypeId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates the API Name that describes the type of article. Use the record type to determine the article structure and other settings for different types of content.
`SourceId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the source from which the article was created (Case or Reply).
`Summary`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Summary of the article. Maximum size is 1000 characters.
`Title`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, idLookup, Sort, Update **Description** Required. Article's title. Maximum size is 255 characters.
`TranslationCompletedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date and time when the article was last translated. Only accessible if your knowledge base supports multiple languages.

Field	Details
TranslationExportedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date and time when the article was last exported for translation. Only accessible if your knowledge base supports multiple languages.
TranslationImportedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date and time when the article was last imported for translation. Only accessible if your knowledge base supports multiple languages.
UrlName	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. Represents the article's URL. Can contain alphanumeric characters and hyphens but can't begin or end with a hyphen. This value should be unique regardless of context. (For example, a unique value allows you to get expected results when running an Apex test with `SeeAllData` set to `false`.) `UrlName` is case-sensitive and its maximum size is 255 characters.
ValidationStatus	**Type** picklist **Properties** Defaulted on create, Filter, Group **Description** Shows whether the content of the article has been validated. Possible values are `Validated` and `Not Validated`. The default value is `Not Validated`. This field is available in API version 24.0 or later.
VersionNumber	**Type** int **Properties** Group, Sort

Field	Details
	Description The number assigned to a version of an article. This field is available in API version 24.0 and later.

Knowledge__DataCategorySelection

Represents a data category that classifies an article. This object is available in API version 39.0 and later.

Note: By default, the prefix for this object name is `Knowledge` and that is the value shown in this reference. However, this prefix can be modified by changing the **Object Name** for the Knowledge__kav object in Object Manager.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Lightning Knowledge must be enabled in your org.

Fields

Field	Details
`DataCategoryGroupName`	**Type** datacategorygroupreference **Properties** Create **Description** Unique name of the data category group which has categories associated with the article.
`DataCategoryName`	**Type** datacategorygroupreference **Properties** Create **Description** Unique name of the data category associated with the article.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort

Field	Details
	Description ID of the article associated with the data category selection.

Usage

Every article in Salesforce Knowledge can be categorized. A data category selection represents a category that has been selected to classify an article. You can use this object to query and manage article categorization in your organization. Client applications can create a categorization for an article with a Draft status. They can also delete and query article categorizations.

Note: When using this object to classify an article, you can't select both a category (for example USA) and one of its descendants (California) or ascendant categories (North America). In this case, only the first category is selected.

KnowledgeableUser

Represents a user identified as knowledgeable about a specific topic, and ranks them relative to other knowledgeable users. This object is available in API version 31.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`NetworkId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the Experience Cloud site the topic exists in. This field is available only if digigal experiences is enabled for your org.
`RawRank`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Rank of this user's knowledge on the topic relative to other users.
`TopicId`	**Type** reference

Field Name	Details
	Properties Filter, Group, Sort **Description** Unique ID for the topic in Salesforce.
`UserId`	**Type** reference **Properties** Filter, Group, Sort **Description** Unique ID for the user in Salesforce.

KnowledgeArticle

Provides read-only access to an article and the ability to delete the master article. This object is available in API version 19.0 and later.

Unlike KnowledgeArticleVersion, the ID of a KnowledgeArticle record is identical irrespective of the article's version (status).

Knowledge__ka on page 1639 is derived from this object.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Knowledge must be enabled in your org. A user must have the View Articles permission enabled. Salesforce Knowledge users, unlike customer and partner users, must also be granted the `Knowledge User` feature license.

Fields

Field Name	Details
`ArchivedById`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the user who archived the article.
`ArchivedDate`	**Type** dateTime

Field Name	Details
	Properties Filter, Nillable, Sort **Description** The date when the article was archived.
`ArticleNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The unique number automatically assigned to the article when it's created. You can't change the format or value for this field.
`CaseAssociationCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of cases attached to the article.
`FirstPublishedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the article was first published.
`LastPublishedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the article was last published.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.

Field Name	Details
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (`LastReferencedDate`) but not viewed it.
MasterLanguage	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The article's original language. Only accessible if your knowledge base supports multiple languages.
MigratedToFromArticle	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ID for the corresponding pre- or post-migration article. Contains values only in orgs that migrate from Knowledge in Salesforce Classic to Lightning Knowledge. This field is available in API version 45.0 and later.
TotalViewCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Total number of views for this article. This field is available in API version 39.0 and later.

Usage

Use this object to query or retrieve articles. KnowledgeArticle can be used in a SOQL clause, but doesn't provide access to the fields from the article. Provides read-only access to an article and the ability to delete the master article.

Usage for SOQL with KnowledgeArticle

To expose the `migrated_to_from_id` column on **KnowledgeArticle** and **KnowledgeArticleVersion** to the sObject API: expose **MigratedToFromArticle** in **KnowledgeArticle**.

For SOQL:

- To filter by `MigratedToFromArticle`, remove any other filters.
- When filtering by `MigratedToFromArticle`, use the '=' or 'IN' operator.
- When filtering by `MigratedToFromArticle`, the value can't be null or empty.

SEE ALSO:

Knowledge

KnowledgeArticleVersion

KnowledgeArticleVersion

Provides a global view of standard article fields across all types of articles depending on their version. This object is available in API version 18.0 and later.

Use this object to:

- Query or search generically across multiple types of articles.
- Filter on a specific version.
- Update standard fields, those fields that are updateable, in draft versions.

When you query on the archived article, the results include both the article and the article's archived versions.

Knowledge__kav on page 1641 is derived from this object.

Supported Calls

`describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `search()`

Note:

- You can only update draft versions.
- You can't update draft translations with the `knowledgeManagement` REST API.
- For Lightning Knowledge, to create, update, or delete a Knowledge article version, use the call on Knowledge__kav. For example, to delete, use `Knowledge__kav.delete()`.
- For Knowledge in Salesforce Classic, to create, update, or delete a Knowledge article version, use the call on *`ArticleType`*`__kav`, where *`ArticleType`* is the name of the article's type. For example, to delete, use `ArticleType__kav.delete()`.

Special Access Rules

Knowledge must be enabled in your org.A user must have the View Articles permission enabled. Salesforce Knowledge users, unlike customer and partner users, must also be granted the `Knowledge User` feature license.

Fields

Field Name	Details
ArchivedById	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the user who archived the article.
ArchivedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date the article version was archived.
ArticleArchivedById	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the user who archived the article.
ArticleArchivedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date the article was archived.
ArticleCaseAttachCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of cases where this article is attached.
ArticleCreatedById	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The ID of the user who created the article.
`ArticleCreatedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date the article was created.
`ArticleMasterLanguage`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The article's original language. Only accessible if your knowledge base supports multiple languages.
`ArticleNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** The unique number automatically assigned to the article when it's created. You can't change the format or value for this field.
`ArticleTotalViewCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Total number of views for the article.
`ArticleType`	**Type** string **Properties** Defaulted on create,Filter **Description** Indicates the API Name of the article type. The `ArticleType` is assigned to the article when it's created. You can't change the value of this field. This field is available in orgs using Knowledge in Salesforce Classic in API version 26.0 and later.

Field Name	Details
AssignedById	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the user who assigned the article.
AssignedToId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the user assigned to the article.
AssignmentDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date the article was assigned to a user.
AssignmentDueDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The due date when an article is assigned.
AssignmentNote	**Type** textarea **Properties** Filter, Nillable, Sort **Description** Notes to the assignee from the user who assigned the article.
FirstPublishedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the article was first published.

Field Name	Details
IsLatestVersion	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the article is the most current version. (`true`) or not (`false`). This field can be `true` on the online or published version, a draft version in the master language, a draft version in a translation, and the latest archived version. However, you can't filter by (PublishState='Online') and (IsLatestVersion=false) because the online version is also the latest version. This field is available in API version 24.0 and later.
IsMasterLanguage	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the article has one or more translations associated with it (`true`) or not (`false`). Only accessible if your knowledge base supports multiple languages.
IsOutOfDate	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the source article has been updated since this translated version was created (`true`) or not (`false`). Only accessible if your knowledge base supports multiple languages.
IsVisibleInApp	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Required. Indicates whether the article is visible in the Articles tab (`true`) or not (`false`).
IsVisibleInCsp	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field Name	Details
	Description Required. Indicates whether the article is visible in the Customer Portal (`true`) or not (`false`).
`IsVisibleInPkb`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Required. Indicates whether the article is visible in the public knowledge base (`true`) or not (`false`).
`IsVisibleInPrm`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Required. Indicates whether the article is visible in the partner portal (`true`) or not (`false`).
`KnowledgeArticleId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the article independent from its version. The value for this field is retrieved from the `Id` field of the KnowledgeArticle object.
`Language`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language that the article is written in, such as `French` or `Chinese (Traditional).` Querying or searching articles in SOSL require that you specify the `Language` field in the WHERE clause. The language must be the same for all article types. Before API version 47.0, you must include the `Language` field to filter queries on Knowledge article versions. In API version 47.0 and later, you can filter queries on Knowledge article versions with or without `Language` depending on what you are querying.

Field Name	Details
LastPublishedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the article was last published.
MasterVersionId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the source article, if the article is the translation of a source article. Only accessible if your knowledge base supports multiple languages.
MigratedToFromArticleVersion	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ID for the corresponding pre- or post-migration article version. Contains values only in orgs that migrate from Classic to Lightning Knowledge. Available in API version 43.0 and later.
OwnerId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the article's owner.
PublishStatus	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The publication status for the article: • `Draft`: any draft articles. • `Online`: articles published in Salesforce Knowledge. • `Archived`: archived articles. A user must have the “Manage Articles” permission enabled to use `Online`.

Field Name	Details
	Article queries and searches in SOQL or SOSL require that you specify either the `PublishStatus` or the `Id` field in the WHERE clause. You can search for only one publication status per article type in a single SOSL query. When searching for articles with a `PublishStatus` of `Archived`, also check that `IsLatestVersion` equals `false` in your WHERE clause.
`SourceId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the source from which the article was created (Case or Reply).
`Summary`	**Type** textarea **Properties** Filter, Nillable, Sort **Description** Summary of the article. Maximum size is 1000 characters.
`Title`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** Required. Article's title. Maximum size is 255 characters.
`TranslationCompletedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date and time when the article was last translated. Only accessible if your knowledge base supports multiple languages.
`TranslationExportedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date and time when the article was last exported for translation. Only accessible if your knowledge base supports multiple languages.

Field Name	Details
TranslationImportedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date and time when the article was last imported for translation. Only accessible if your knowledge base supports multiple languages.
UrlName	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** Required. Represents the article's URL. Can contain alphanumeric characters and hyphens but can't begin or end with a hyphen. This value should be unique regardless of context. (For example, a unique value allows you to get expected results when running an Apex test with `SeeAllData` set to `false`.) `UrlName` is case-sensitive and its maximum size is 255 characters.
ValidationStatus	**Type** picklist **Properties** Defaulted on create, Filter, Group **Description** Shows whether the content of the article has been validated. Possible values are `Validated` and `Not Validated`. The default value is `Not Validated`. This field is available in API version 24.0 or later.
VersionNumber	**Type** int **Properties** Group, Sort **Description** The number assigned to a version of an article. This field is available in API version 24.0 and later.

Usage

Use this object to query, retrieve, or search for articles across all types of articles depending on their version. You can update draft master articles. Also, you can delete articles that aren’t drafts. Client applications can use KnowledgeArticleVersion with `describeDataCategoryGroups()` and `describeDataCategoryGroupStructures()` to return the category groups and the category structure associated with Salesforce Knowledge.

To access an article independent of its version, use the KnowledgeArticle object.

In Lightning Knowledge, the type of article is determined by the `RecordType` field on the concrete derived object (for example, Knowledge__kav on page 1641). For Knowledge in Salesforce Classic, the type of article is determined by the `ArticleType` field and the concrete derived object uses the prefix of the article type name (for example, FAQ__kav for the FAQ article type).

SOQL Samples

The following SOQL clause uses KnowledgeArticleVersion to query all published articles from all articles complying with the classification specified in the WITH DATA CATEGORY clause:

```
SELECT Title, Summary
FROM KnowledgeArticleVersion
WHERE PublishStatus='Online'
AND Language = 'en_US'
WITH DATA CATEGORY Geography__c ABOVE_OR_BELOW europe__c AND Product__c BELOW All__c
```

The following SOQL clause for Lightning Knowledge uses the `Offer` record type to limit the query to all draft articles:

```
SELECT Id, Title
FROM Knowledge__kav
WHERE PublishStatus='Draft'
AND Language = 'en_US'
AND RecordTypeId = '<specify RecordTypeId for Offer here>'
WITH DATA CATEGORY Geography__c AT (france__c,usa__c) AND Product__c ABOVE dsl__c
```

The following SOQL clause for Salesforce Classic uses the `Offer` article type to limit the query to all draft articles:

```
SELECT Id, Title
FROM Offer__kav
WHERE PublishStatus='Draft'
AND Language = 'en_US'
WITH DATA CATEGORY Geography__c AT (france__c,usa__c) AND Product__c ABOVE dsl__c
```

The following SOQL clause uses KnowledgeArticleVersion to query the IDs of all archived versions of a particular article:

```
SELECT Id
FROM KnowledgeArticleVersion
WHERE PublishStatus='Archived'
AND IsLatestVersion=false
AND KnowledgeArticleId='kA1D00000001PQ6KAM'
```

SOQL and SOSL with KnowledgeArticleVersion

- Filter on a single value of `PublishStatus` for best results. To find all versions of each article, omit the `PublishStatus` filter, but do filter on one or more primary key IDs. To retrieve all archived versions for a given article, specify a SOQL filter where `IsLatestVersion` is `false`.
- In API version 46.0 and earlier, queries without a filter on `PublishStatus` return published articles by default. In API version 47.0 and later, draft, published, and archived articles are returned when Lightning Knowledge is enabled.
- To support security, only users with the “View Draft Articles” permission see articles whose `PublishStatus` value is `Draft`. Similarly, only users with the “View Archived Articles” permission see articles whose `PublishStatus` value is `Archived`
- Archived article versions are stored in the ***`Knowledge`***`__kav` object. To query archived article versions, specify the article `Id` and set `IsLatestVersion='0'`.

- You can't use binding variables in Apex SOQL statements with KnowledgeArticleVersion objects. For example, the following SOQL statement causes a compilation error.

  ```
  final String PUBLISH_STATUS_ONLINE = 'Online';
  List<Knowledge__kav> articles = [
  SELECT Id FROM Knowledge__kav
  WHERE PublishStatus = :PUBLISH_STATUS_ONLINE
  ];
  ```

  Instead, use dynamic SOQL as follows. See Dynamic SOQL in *Apex Developer Guide*.

  ```
  final String PUBLISH_STATUS_ONLINE = 'Online';
  final String q = 'SELECT Id, PublishStatus FROM Knowledge__kav
  WHERE PublishStatus = :PUBLISH_STATUS_ONLINE';
  List<Knowledge__kav> articles = Database.query(q);
  ```

Other Usage for SOQL and SOSL with KnowledgeArticleVersion

To expose the *migrated_to_from_id* on **KnowledgeArticle** and **KnowledgeArticleVersion** to the sObject API: expose **MigratedToFromArticleVersion** in **KnowledgeArticleVersion**.

- For SOQL:
  - To filter by **MigratedToFromArticleVersion**, remove any other filters.
  - When filtering by **MigratedToFromArticleVersion**, use the '=' or 'IN' operator.
  - When filtering by **MigratedToFromArticleVersion**, the value can't be null or empty.
- SOSL doesn't support **MigratedToFromArticleVersion**.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

KnowledgeArticleVersionHistory
History is available for tracked fields of the object.

SEE ALSO:

Knowledge

KnowledgeArticle

KnowledgeArticleViewStat

KnowledgeArticleVoteStat

KnowledgeArticleVersionHistory

Enables read-only access to the full history of an article. This object is available in API version 25.0 and later.

Knowledge__VersionHistory is derived from this object. To access this derived object, turn on field history tracking for Knowledge objects.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Special Access Rules

Knowledge must be enabled in your org. This object respects field, entity, and record-level security. You must have at least "Read" permission on the article type or the field to access its history. For data category security, Salesforce determines access based on the categorization of the online version of an article. If there is no online version, then security is applied based on the archived version, followed by the security of the draft version.

Fields

Field Name	Details
`DataType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of data that is tracked in the history table. This field is available in API version 50.0 and later.
`EventType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of event that is tracked in the history table.
`FieldName`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Name of the tracked field.
`Language`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort

Field Name	Details
	Description The language that the article is written in, such as `French` or `Chinese (Traditional)`. Querying or searching articles in SOSL requires that you specify the `Language` field in the WHERE clause. The language must be the same for all article types.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The most recent value of the field before it was changed.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the article.
`ParentSobjectType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of object that contains the field.
`VersionId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID assigned to a version of the article.

Field Name	Details
VersionNumber	**Type** int **Properties** Filter, Group, Sort **Description** The number assigned to a version of an article. This field is available in API version 24.0 and later.

Usage

Use this object to query events in the history of an article. For example, you can retrieve the number of edits a particular user has made to an article, how many times the article has been published, and so on.

KnowledgeArticleViewStat

Provides statistics on the number of views for the specified article across all article types. This object is read-only and available in API version 20.0 and later.

Knowledge__ViewStat is derived from this object.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Knowledge must be enabled in your org. Users must have access to the published version of an article to retrieve its views. For more information on published article version, see the `PublishStatus` field in KnowledgeArticleVersion.

Fields

Field Name	Details
Channel	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The channel where the article is viewed: • `AllChannels` for article views across all channels. • `App` for the internal Salesforce Knowledge application.

Field Name	Details
	• `Pkb` for article views in public knowledge base. • `Csp` for Customer Portal. • `Prm` for article view in partner portal.
`NormalizedScore`	**Type** double **Properties** Filter, Nillable, Sort **Description** Article's weighted views in the selected channel. The article with most views has a score of 100. Other article views are then calculated relative to this highest view score. For example, if the best read article has 2000 views and another has 1000. The first one gets a score of 100 while the second gets 50.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the viewed article. This corresponds to a KnowledgeArticle record.
`ViewCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of unique views an article has received in the selected channel. An article with a high number of views may not always have a high normalized score. The normalized score for an article is calculated based on views over time, with more recent views earning a higher score. This field is available in API version 27.0 and later.

Usage

Use this object to query or retrieve statistics for article views.

Alternatively, client applications can use the article type `API Name` followed by `__ViewStat` to query or retrieve most viewed articles from a specific article type.

SOQL Samples

The following SOQL clause uses KnowledgeArticleViewStat to query all the article views in Salesforce Knowledge and return the related articles:

```
SELECT Id, NormalizedScore, Parent.Id
        FROM KnowledgeArticleViewStat where Channel = 'App'
        ORDER BY NormalizedScore
```

Use the following clause to restrict your query to Offer articles for the `Offer` article type:

```
SELECT Id, NormalizedScore, Parent.Id
        FROM Offer__ViewStat where Channel = 'App'
        ORDER BY NormalizedScore
```

SEE ALSO:

- Knowledge
- KnowledgeArticle
- KnowledgeArticleVersion
- KnowledgeArticleVoteStat

KnowledgeArticleVoteStat

Provides the weighted rating for the specified article on a scale of 1 to 5 across all article types. This object is read-only and available in API version 20.0 and later.

Knowledge__VoteStat is derived from this object.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Knowledge must be enabled in your org. Users must have access to the published version of an article to retrieve its votes. For more information on published article version, see the `PublishStatus` field in KnowledgeArticleVersion

Fields

Field Name	Details
`Channel`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The channel where the article is rated:

Field Name	Details
	• `AllChannels` for article views across all channels. • `App` for the internal Salesforce Knowledge application. • `Pkb` for article views in public knowledge base. • `Csp` for Customer Portal. • `Prm` for article view in partner portal.
`NormalizedScore`	**Type** double **Properties** Filter, Nillable, Sort **Description** Article's weighted score on a scale of 1 to 5. A higher score means more votes. Articles without recent votes trend towards an average rating of three stars.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** The rated article. This corresponds to a KnowledgeArticle record.

Usage

Use this object to query or retrieve the rating for an article.

Alternatively, client applications can use the article type `API Name` followed by `__VoteStat` to query or retrieve the rating for an article for a specific article type.

SOQL Samples

See KnowledgeArticleViewStat.

SEE ALSO:

Knowledge

KnowledgeArticle

KnowledgeArticleVersion

KnowledgeArticleViewStat

LandingPage

Represents a Pardot landing page that has been synced to Salesforce. A landing page is a web page that a visitor reaches after clicking a link or advertisement. This object is available in API version 42.0 and later.

Supported Calls

`describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`

Special Access Rules

To access this object, your org must use Pardot and users need the CRM User or Sales User permission set.

Fields

Field Name	Details
CampaignId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the related campaign.
FormErrorRate	**Type** percent **Properties** Filter, Nillable, Sort **Description** The percentage of errors made on the landing page form. Calculated as total errors divided by total views.
FormSubmissionRate	**Type** percent **Properties** Filter, Nillable, Sort **Description** The percentage of form submissions based on the total number of landing page views.
LastReferencedDate	**Type** dateTime

Field Name	Details
	Properties Filter, Nillable, Sort **Description** Indicates when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time when the current user last viewed this record. If this value is null, this record might only have been referenced (see LastReferencedDate) and not viewed.
Name	**Type** string **Properties** Filter, Group, Sort **Description** The name of the landing page.
TotalFormErrors	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** The total number of times a visitor or prospect enters an invalid email address or leaves a required field blank on a landing page form.
TotalFormSubmissions	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** The number of times a form on the landing page has been submitted.
TotalTrackedLinkClicks	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort

Field Name	Details
	Description The number of times prospects clicked a link on the landing page's thank you page.
TotalViews	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** The total number of times visitors and prospects viewed your landing page. This total includes multiple views from the same person.
UniqueFormErrors	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** The number of individual visitors and prospects who made an error on the form. This metric doesn't include multiple errors from the same person.
UniqueFormSubmissions	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** The number of individual visitors who submitted a form on the landing page. This metric doesn't include multiple submissions from the same person.
UniqueTrackedLinkClicks	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** The number of times a prospect clicked a link on the landing page's thank you page. This metric doesn't include multiple clicks of the same link.
UniqueViews	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort

Field Name	Details
	Description The number of individual visitors and prospects who viewed your landing page. This metric doesn't include multiple views from the same person.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

LandingPageFeed
Feed tracking is available for the object.

Lead

Represents a prospect or lead.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `merge()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`ActionCadenceAssigneeId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the sales rep designated to work the lead through their assigned sales cadence. This field is available in API version 48.0 if you enabled High Velocity Sales.
`ActionCadenceId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the lead's assigned sales cadence. This field is available in API version 48.0 if you enabled High Velocity Sales.
`ActivityMetricId`	**Type** reference

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** The ID of the related activity metric. This field is available in API version 48.0 if you enabled High Velocity Sales.
`Address`	**Type** address **Properties** Filter, Nillable **Description** The compound form of the address. Read-only. For details on compound address fields, see Address Compound Fields.
`AnnualRevenue`	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** Annual revenue for the lead's company.
`City`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** City for the lead's address.
`CleanStatus`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates the record's clean status compared with Data.com. Values include: `Matched`, `Different`, `Acknowledged`, `NotFound`, `Inactive`, `Pending`, `SelectMatch`, or `Skipped`. Several values for `CleanStatus` appear with different labels on the lead record. • `Matched` appears as `In Sync` • `Acknowledged` appears as `Reviewed` • `Pending` appears as `Not Compared`

Field	Details
Company	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. The lead's company. Note: If person account record types have been enabled, and if the value of `Company` is null, the lead converts to a person account.
CompanyDunsNumber	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The Data Universal Numbering System (D-U-N-S) number, which is a unique, nine-digit number assigned to every business location in the Dun & Bradstreet database that has a unique, separate, and distinct operation. Industries and companies use D-U-N-S numbers as a global standard for business identification and tracking. Maximum size is 9 characters. Note: This field is only available to organizations that use Data.com Prospector or Data.com Clean.
ConnectionReceivedId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the PartnerNetworkConnection that shared this record with your organization. This field is available if you enabled Salesforce to Salesforce.
ConnectionSentId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the PartnerNetworkConnection that you shared this record with. This field is available if you enabled Salesforce to Salesforce. This field is supported using API versions earlier than 15.0. In all other API versions, this field's value is null. You can use the new PartnerNetworkRecordConnection object to forward records to connections.
ConvertedAccountId	**Type** reference

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** Object reference ID that points to the account into which the lead converted.
ConvertedContactId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Object reference ID that points to the contact into which the lead converted.
ConvertedDate	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Date on which this lead was converted.
ConvertedOpportunityId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Object reference ID that points to the opportunity into which the lead has been converted.
Country	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The lead's country.
CountryCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO country code for the lead's address.
CurrencyIsoCode	**Type** picklist

Field	Details
	Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** The lead's description.
Division	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** A logical segment of your organization's data. For example, if your company is organized into different business units, you could create a division for each business unit, such as "North America," "Healthcare," or "Consulting." Available only if the organization has the Division permission enabled.
Email	**Type** email **Properties** Create, Filter, Group, idLookup, Nillable, Sort, Update **Description** The lead's email address.
EmailBouncedDate	**Type** dateTime **Properties** Filter, Nillable, Sort, Update **Description** If bounce management is activated and an email sent to the lead bounced, the date and time of the bounce.
EmailBouncedReason	**Type** string **Properties** Filter, Group, Nillable, Sort, Update

Field	Details
	Description If bounce management is activated and an email sent to the lead bounced, the reason for the bounce.
`Fax`	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The lead's fax number.
`FirstCallDateTime`	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The date and time of the first call placed to the lead. This field is available in API version 48.0 if you enabled High Velocity Sales.
`FirstEmailDateTime`	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The date and time of the first email sent to the lead. This field is available in API version 48.0 if you enabled High Velocity Sales.
`FirstName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The lead's first name up to 40 characters.
`HasOptedOutOfEmail`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Update **Description** Indicates whether the lead doesn't want to receive email from Salesforce (`true`) or does (`false`). Label is **Email Opt Out**.

Field	Details
GeocodeAccuracy	**Type** picklist **Properties** Create, Filter, Group, Retrieve, Query, Restricted picklist, Nillable, Sort, Update **Description** Accuracy level of the geocode for the address. For details on geolocation compound fields, see Compound Field Considerations and Limitations.
IndividualId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the data privacy record associated with this lead. This field is available if you enabled Data Protection and Privacy in Setup.
Industry	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Industry in which the lead works.
IsConverted	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Indicates whether the lead has been converted (`true`) or not (`false`). Label is **Converted**.
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
IsUnreadByOwner	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description If true, lead has been assigned, but not yet viewed. See Unread Leads for more information. Label is **Unread By Owner**.
`Jigsaw`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** References the ID of a contact in Data.com. If a lead has a value in this field, it means that a contact was imported as a lead from Data.com. If the contact (converted to a lead) was not imported from Data.com, the field value is null. Maximum size is 20 characters. Available in API version 22.0 and later. Label is **Data.com Key**. Important: The `Jigsaw`field is exposed in the API to support troubleshooting for import errors and reimporting of corrected data. Do not modify the value in the `Jigsaw` field.
`LastActivityDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Value is the most recent of either: • Due date of the most recent event logged against the record. • Due date of the most recently closed task associated with the record.
`LastName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. Last name of the lead up to 80 characters.
`LastReferencedDate`	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.

Field	Details
LastViewedDate	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (LastReferencedDate) but not viewed it.
Latitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with Longitude to specify the precise geolocation of an address. Acceptable values are numbers between –90 and 90 up to 15 decimal places. For details on geolocation compound fields, see Compound Field Considerations and Limitations.
Longitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with Latitude to specify the precise geolocation of an address. Acceptable values are numbers between –180 and 180 up to 15 decimal places. For details on geolocation compound fields, see Compound Field Considerations and Limitations.
LeadSource	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The lead's source.
MasterRecordId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** If this record was deleted as the result of a merge, this field contains the ID of the record that was kept. If this record was deleted for any other reason, or has not been deleted, the value is null.

Field	Details
	Note: When using Apex triggers to determine which record was deleted in a merge event, this field's value is the ID of the record that remains in `Trigger.old`. In `Trigger.new`, the value is `null`.
`MiddleName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The lead's middle name up to 40 characters. To enable this field, ask Salesforce Customer Support for help.
`MobilePhone`	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The lead's mobile phone number.
`Name`	**Type** string **Properties** Filter, Group, Sort **Description** Concatenation of `FirstName`, `MiddleName`, `LastName`, and `Suffix` up to 203 characters, including whitespaces.
`NumberOfEmployees`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Number of employees at the lead's company. Label is **Employees**.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the lead's owner.

Field	Details
PartnerAccountId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the partner account for the partner user that owns this lead. Available if Partner Relationship Management is enabled or if digital experiences is enabled and you have partner portal licenses. Note: If you are uploading leads using API version 15.0 or earlier, and one of the leads in the batch has a partner user as the owner, the `Partner Account` field on all leads in the batch is set to that partner user's account regardless of whether the partner user is the owner. In version 16.0, the `Partner Account` field is set to the appropriate account for the partner user that owns the lead. If the owner of the lead is not a partner user, this field remains empty.
Phone	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The lead's phone number.
PhotoUrl	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** Path to be combined with the URL of a Salesforce instance (*Example:* https://*`yourInstance`*.salesforce.com/) to generate a URL to request the social network profile image associated with the lead. Generated URL returns an HTTP redirect (code 302) to the social network profile image for the lead. Empty if Social Accounts and Contacts isn't enabled or if Social Accounts and Contacts has been disabled for the requesting user.
PostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Postal code for the address of the lead. Label is **Zip/Postal Code**.

Field	Details
Rating	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Rating of the lead.
RecordTypeId	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the record type assigned to this object.
Salutation	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Salutation for the lead.
ScoreIntelligenceId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the intelligent field record that contains lead score.
State	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** State for the address of the lead.
StateCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO state code for the lead’s address.

Field	Details
`Status`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Status code for this converted lead. Status codes are defined in `Status` and represented in the API by the LeadStatus object.
`Street`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Street number and name for the address of the lead.
`Suffix`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The lead's name suffix up to 40 characters. To enable this field, ask Salesforce Customer Support for help.
`Title`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Title for the lead, such as CFO or CEO.
`Website`	**Type** url **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Website for the lead.

Note: If you import lead data and need to set the value for an audit field, such as `CreatedDate`, contact Salesforce. Audit fields are automatically updated during API operations unless you request to set these fields yourself..

Converted Leads

Leads have a special state to indicate that they have been converted into an account, a contact, and an opportunity. Your client application can convert leads via the `convertLead()` call. Users can also convert leads in Salesforce. After a lead has been converted, it is read-only. However, you can query converted lead records. Only users with the View and Edit Converted Leads permission can update converted lead records.

Leads have several fields that indicate their converted status. These special fields are set when converting the lead in the user interface.

- `ConvertedAccountId`
- `ConvertedContactId`
- `ConvertedDate`
- `ConvertedOpportunityId`
- `IsConverted`
- `Status`

Note: If person account record types have been enabled, and if the value of `Company` is null, the lead converts to a person account.

Unread Leads

Leads have a special state to indicate that they have not been viewed or edited by the lead owner. In Salesforce, this is helpful for users to know which leads have been assigned to them but which they have not touched yet. `IsUnreadByOwner` is `true` if the lead owner has not yet viewed or edited the lead, and `false` if the lead owner has viewed or edited the lead at least once.

Lead Status Picklist

Each `Status` value corresponds to either a converted or unconverted status in the lead status picklist, as defined in the user interface. To obtain the lead status values in the picklist, a client application can query LeadStatus.

You can't convert a lead via the API by changing `Status` to one of the converted lead status values. When you convert qualified leads into an account, contact, and opportunity, you can select one of the converted status types for the lead. Leads with a converted status type are no longer available in the Leads tab, although you can include them in reports.

Usage

To update a lead or to convert one with `convertLead()`, log in to your client application with the "Edit" permission on leads.

When you create, update, or upsert a lead, your client application can have the lead assigned to multiple user records based on assignment rules that have been configured in Salesforce.

To use this feature, your client application needs to set either of the following options (but not both) in the AssignmentRuleHeader used in create or update:

Field	Field Type	Details
`assignmentRuleId`	reference	ID of the assignment rule to use. Can be an inactive assignment rule. If unspecified and `useDefaultRule` is `true`, then the default assignment rule is used. To find the ID for a given assignment rule, query the AssignmentRule object (specifying `RuleType="leadAssignment"`), iterate through the returned

Field	Field Type	Details
		AssignmentRule records, find the one you want to use, retrieve its ID, and then specify its ID in this field in the AssignmentRuleHeader.
`useDefaultRule`	boolean	Specifies whether to use the default rule for rule-based assignment (`true`) or not (`false`). Default rules are assigned in the user interface.

Java Sample

The following Java sample shows how to automatically assign a newly created lead.

```
package wsc;

import com.sforce.soap.enterprise.Connector;
import com.sforce.soap.enterprise.EnterpriseConnection;
import com.sforce.ws.ConnectionException;
import com.sforce.ws.ConnectorConfig;
import com.sforce.soap.enterprise.sobject.Lead;
import com.sforce.soap.enterprise.QueryResult;
import com.sforce.soap.enterprise.SaveResult;
import com.sforce.soap.enterprise.sobject.SObject;

public class LeadAssignment {

    static final String USERNAME = "REPLACE USER NAME";
    static final String PASSWORD = "REPLACE PASSWORD";
    static EnterpriseConnection connection;

    static LeadAssignment _leadAssignment;

    // Main
    public static void main(String[] args)
    {
        // Establish connection and login
        ConnectorConfig config = new ConnectorConfig();
        config.setUsername(USERNAME);
        config.setPassword(PASSWORD);
        try {
            connection = Connector.newConnection(config);
            System.out.println("Logged in, endpoint: " + config.getAuthEndpoint());
        } catch (ConnectionException e1) {
            e1.printStackTrace();
        }

        // Create lead
        _leadAssignment = new LeadAssignment();
        try {
            _leadAssignment.CreateLead();
        } catch (Exception e) {
            e.printStackTrace();
        }
```

```
        // Logout
        try {
            connection.logout();
            System.out.println("Logged out");
        } catch (ConnectionException ce) {
            ce.printStackTrace();
        }
    }

    public void CreateLead() throws ConnectionException
    {
        // Create a new Lead and assign various properties
        Lead lead = new Lead();

        lead.setFirstName("Joe");
        lead.setLastName("Smith");
        lead.setCompany("ABC Corporation");
        lead.setLeadSource("API");
        // The lead assignment rule will assign any new leads that
        // have "API" as the LeadSource to a particular user

        // In this sample we will look for a particular rule and if found
        // use the id for the lead assignment. If it is not found we will
        // instruct the call to use the current default rule. You can't use
        // both of these values together.
        QueryResult qr = connection.query("SELECT Id FROM AssignmentRule WHERE Name = " +

                             "'Mass Mail Campaign' AND SobjectType = 'Lead'");
        if (qr.getSize() == 0) {
            connection.setAssignmentRuleHeader(null, true);
        } else {
            connection.setAssignmentRuleHeader(qr.getRecords()[0].getId(), false);
        }

        // Every operation that results in a new or updated lead will
        // use the specified rule until the header is removed from the
        // connection.
        SaveResult[] sr = connection.create(new SObject[] {lead});
        for (int i=0;i<sr.length;i++) {
            if (sr[i].isSuccess()) {
                System.out.println("Successfully created lead with id of: " +
                                   sr[i].getId() + ".");
            } else {
                System.out.println("Error creating lead: " +
                                   sr[i].getErrors()[0].getMessage());
            }
        }

        // This call effectively removes the header, the next lead will
        // be assigned to the default lead owner.
        connection.clearAssignmentRuleHeader();
    }
}
```

C# Sample

The following C# sample shows how to automatically assign a newly created lead.

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.ServiceModel;
using LeadSample.sforce;

namespace LeadSample
{
    class LeadAssignment
    {
        private static SoapClient client;
        private static SoapClient apiClient;
        private static SessionHeader header;
        private static LoginResult loginResult;
        private static readonly string Username = "REPLACE USERNAME";
        private static readonly string Password = "REPLACE PASSWORD AND SECURITY TOKEN";

        // Create the proxy binding and login
        private LeadAssignment()
        {
            client = new SoapClient();

            try
            {
                loginResult = client.login(null, Username, Password);
            }
            catch (Exception e)
            {
                Console.WriteLine("Unexpected login error: " + e.Message);
                Console.WriteLine(e.StackTrace);
                return;
            }
            // Access API endpoint and create new client
            header = new SessionHeader();
            header.sessionId = loginResult.sessionId;
            apiClient = new SoapClient("Soap", loginResult.serverUrl);
        }

        [STAThread]
        static void Main(string[] args)
        {
            LeadAssignment leadAssignment = new LeadAssignment();
            try
            {
                leadAssignment.CreateLead();
            }
            catch (Exception e)
            {
                Console.WriteLine(e.Message);
```

```
            Console.WriteLine(e.StackTrace);
            Console.WriteLine(e.InnerException);
        }
        // logout
        client.logout(header);
    }

    public void CreateLead()
    {
        // Create a new Lead and assign various properties
        Lead lead = new Lead();

        lead.FirstName = "John";
        lead.LastName = "Brown";
        lead.Company = "ABC Corporation";
        lead.LeadSource = "Advertisement";
        // Setting the lead source for a pre-existing lead assignment rule. This
        // rule was created outside of this sample and will assign any new leads
        // that have "Advertisement" as the LeadSource to a particular user.

        // Create the assignment rule header and add it to the proxy binding
        AssignmentRuleHeader arh = new AssignmentRuleHeader();

        // In this sample we will look for a particular rule and if found
        // use the id for the lead assignment. If it is not found we will
        // instruct the call to use the current default rule. Both these
        // values can't be used together.
        QueryResult qr = null;
        string query = "SELECT Id FROM AssignmentRule WHERE Name = " +
            "'Mass Mail Campaign' AND SobjectType = 'Lead'";
        try
        {
            LimitInfo[] limitArray = apiClient.query(
                header, // sessionheader
                null,   // queryoptions
                null,   // mruheader
                null,   // packageversionheader
                query,  // SOQL query
                out qr);
        }
        catch (Exception e)
        {
            Console.WriteLine("Unexpected query error: " + e.Message);
            Console.WriteLine(e.StackTrace);
        }
        if (qr.size == 0)
        {
            arh.useDefaultRule = true;
        }
        else
        {
            arh.assignmentRuleId = qr.records[0].Id;
        }
```

```
            // Create the lead using our Assignment Rule header
            LimitInfo[] li;
            SaveResult[] sr;
            apiClient.create(
                header, // sessionheader
                arh,    // assignmentruleheader
                null,   // mruheader
                null,   // allowfieldtrunctionheader
                null,   // disablefeedtrackingheader
                null,   // streamingenabledheader
                null,   // allornoneheader
                null,   // duplicateruleheader
                null,   // localeoptions
                null,   // debuggingheader
                null,   // packageversionheader
                null,   // emailheader
                new sObject[] { lead },
                out li,
                out sr);
            foreach (SaveResult s in sr)
            {
                if (s.success)
                {
                    Console.WriteLine("Successfully created Lead with ID: {0}", s.id);
                }
                else
                {
                    Console.WriteLine("Error creating Lead: {0}", s.errors[0].message);
                }
            }
        }
    }
}
```

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

LeadFeed (API version 18.0)
Feed tracking is available for the object.

LeadHistory
History is available for tracked fields of the object.

LeadOwnerSharingRule
Sharing rules are available for the object.

LeadShare

Sharing is available for the object.

SEE ALSO:

LeadOwnerSharingRule

LeadShare

LeadStatus

PartnerNetworkConnection

LeadCleanInfo

Stores the metadata Data.com Clean uses to determine a lead record's clean status. Helps you automate the cleaning or related processing of lead records.

> Note: When your Data.com Prospector or Data.com Clean contract expires, Data.com features, objects, and fields will be removed from your org.
>
> To support customers' needs around compliance and to remain a leader in trust and privacy, Salesforce removed all contact data from the Data.com service on February 1, 2021.
>
> For more information, see Data.com Prospector and Clean Retirement.

Lead Clean Info provides a snapshot of the data in your Salesforce lead record and its matched Data.com record at the time the Salesforce record was cleaned.

Lead Clean Info includes a number of bit vector fields, whose component fields each correspond to individual object fields and provide related data or status information about those fields. For example, the bit vector field `IsDifferent` has an `IsDifferentTitle` field. If the `IsDifferentTitle` field's value is `False`, that means the `Title` field value is *the same* on the Salesforce lead record and its matched Data.com record.

LeadCleanInfo bit vector fields include:

- `CleanedBy` indicates who (a user) or what (a Clean job) cleaned the lead record.
- `IsDifferent` indicates whether or not a field on the lead record has a value that differs from the corresponding field on the matched Data.com record.
- `IsFlaggedWrong` indicates whether or not a field on the lead record has a value that is flagged as wrong to Data.com.
- `IsReviewed` indicates whether or not a field on the lead record is in a `Reviewed` state, which means that the value was reviewed but not accepted..

Their individual bits are defined here

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`

Fields

Field Name	Details
Address	**Type** address **Properties** Filter, Nillable **Description** The compound form of the address. Read-only. See Address Compound Fields for details on compound address fields.
AnnualRevenue	**Type** currency **Properties** Filter, Nillable, Sort **Description** Estimated annual revenue of the lead.
City	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address of the lead.
CleanedByJob	**Type** boolean **Properties** Filter **Description** Indicates whether the lead record was cleaned by a Data.com Clean job (`true`) or not (`false`).
CleanedByUser	**Type** boolean **Properties** Filter **Description** Indicates whether the lead record was cleaned by a Salesforce user (`true`) or not (`false`).
CompanyDunsNumber	**Type** string

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The Data Universal Numbering System (D-U-N-S) number is a unique, nine-digit number assigned to every business location in the Dun & Bradstreet database that has a unique, separate, and distinct operation. D-U-N-S numbers are used by industries and organizations around the world as a global standard for business identification and tracking.
CompanyName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the company.
ContactStatusDataDotCom	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** The status of the contact associated with the lead per Data.com. Values are: `Contact is Active per Data.com`, `Phone is Wrong per Data.com` , `Email is Wrong per Data.com`, `Phone and Email are Wrong per Data.com`, `Contact Not at Company per Data.com`, `Contact is Inactive per Data.com`, `Company this contact belongs to is out of business per Data.com`, `Company this contact belongs to never existed per Data.com` or `Email address is invalid per Data.com`.
Country	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address of the lead.
DandBCompanyDunsNumber	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The D-U-N-S Number on the D&B Company record (if any) that is linked to the lead.
DataDotComCompanyId	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ID Data.com maintains for the company associated with the lead.
DataDotComId	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ID Data.com maintains for the contact associated with the lead.
Email	**Type** email **Properties** Filter, Group, Nillable, Sort **Description** The lead's email address.
FirstName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The lead's first name.
Industry	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** The industry the lead belongs to.
IsDifferentAnnualRevenue	**Type** boolean

Field Name	Details
	Properties Filter **Description** Indicates whether the lead's `AnnualRevenue` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentCity`	**Type** boolean **Properties** Filter **Description** Indicates whether the lead's `City` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentCompanyDunsNumber`	**Type** boolean **Properties** Filter **Description** Indicates whether the lead's `Company D-U-N-S Number` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentCompanyName`	**Type** boolean **Properties** Filter **Description** Indicates whether the lead's `Company Name` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentCountry`	**Type** boolean **Properties** Filter **Description** Indicates whether the lead's `Country` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentCountryCode`	**Type** boolean

Field Name	Details
	Properties Filter **Description** Indicates whether the account's `Country Code` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentDandBCompanyDunsNumber`	**Type** boolean **Properties** Filter **Description** Indicates whether the lead's `D&B Company D-U-N-S Number` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentEmail`	**Type** boolean **Properties** Filter **Description** Indicates whether the lead's `Email` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentFirstName`	**Type** boolean **Properties** Filter **Description** Indicates whether the lead's `First Name` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentIndustry`	**Type** boolean **Properties** Filter **Description** Indicates whether the lead's `Industry` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentLastName`	**Type** boolean

Field Name	Details
	Properties Filter **Description** Indicates whether the lead's `Last Name` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentNumberOfEmployees`	**Type** boolean **Properties** Filter **Description** Indicates whether the lead's `No. of Employees` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentPhone`	**Type** boolean **Properties** Filter **Description** Indicates whether the lead's `Phone` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentPostalCode`	**Type** boolean **Properties** Filter **Description** Indicates whether the lead's `Postal Code` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentState`	**Type** boolean **Properties** Filter **Description** Indicates whether the lead's `State` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentStateCode`	**Type** boolean

Field Name	Details
	Properties Filter **Description** Indicates whether the account's `State Code` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentStreet`	**Type** boolean **Properties** Filter **Description** Indicates whether the lead's `Street` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentTitle`	**Type** boolean **Properties** Filter **Description** Indicates whether the lead's `Title` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsFlaggedWrongAddress`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `Address` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongAnnualRevenue`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `Annual Revenue` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongCompanyDunsNumber`	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description Indicates whether the lead's `Company D-U-N-S Number` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongCompanyName`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `Company Name` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongEmail`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `Email` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongIndustry`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `Industry` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongName`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `Name` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongNumberOfEmployees`	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description Indicates whether the lead's `No. of Employees` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongPhone`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `Phone` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongTitle`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `Title` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsInactive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the lead has been reported to Data.com as *`Inactive`* (`true`) or not (`false`).
`IsReviewedAddress`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `Address` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedAnnualRevenue`	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description Indicates whether the lead's `Annual Revenue` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedCompanyDunsNumber`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `Company D-U-N-S Number` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedCompanyName`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `Company Name` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedDandBCompanyDunsNumber`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `D&B Company D-U-N-S Number` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedEmail`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `Email` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedIndustry`	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description Indicates whether the lead's `Industry` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedName`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `Name` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedNumberOfEmployees`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `No. of Employees` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedPhone`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `Phone` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedTitle`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `Title` field value is in a `Reviewed` state (`true`) or not (`false`).
`LastMatchedDate`	**Type** dateTime **Properties** Filter, Sort **Description** The date the lead record was last matched and linked to a Data.com record.

Field Name	Details
LastName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The lead's last name.
LastStatusChangedById	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of who or what last changed the record's `Clean Status` field value: a Salesforce user or a Clean job.
LastStatusChangedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date on which the record's `Clean Status` field value was last changed.
Latitude	**Type** double **Properties** Filter, Nillable, Sort **Description** Used with `Longitude` to specify the precise geolocation of a billing address. Data not currently provided.
LeadId	**Type** reference **Properties** Filter, Group, Sort **Description** The unique, system-generated ID assigned when the lead record was created.
Longitude	**Type** double **Properties** Filter, Nillable, Sort

Field Name	Details
	Description Used with `Latitude` to specify the precise geolocation of a billing address. Data not currently provided.
`Name`	**Type** string **Properties** Filter, Group, Sort, Update **Description** Field label is **Lead Clean Info Name**. The name of the lead. Maximum size is 255 characters.
`NumberOfEmployees`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of employees working at the lead.
`Phone`	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** The phone number for the lead.
`PostalCode`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address of the lead.
`State`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address of the lead.
`Street`	**Type** textarea

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** Details for the billing address of the lead.
`Title`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The lead's title.

Usage

Developers can create triggers that read the Lead Clean Info fields to help automate the cleaning or related processing of lead records.

LeadOwnerSharingRule

Represents the rules for sharing a lead with users other than the owner.

Note: To enable access to this object for your org, contact Salesforce customer support. However, we recommend that you instead use Metadata API to programmatically update owner sharing rules because it triggers automatic sharing rule recalculation. The SharingRules Metadata API type is enabled for all orgs.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters. This field is available in API version 29.0 and later.

Field	Details
DeveloperName	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. This field is available in API version 24.0 and later. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
GroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group. Leads owned by users in the source group trigger the rule to give access.
LeadAccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of sharing being allowed. The possible values are: • `Read` • `Edit`
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.

Field	Details
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the target user or group. The target user or group is being given access.

Usage

Use these objects to manage the sharing rules for leads. General sharing and Territory-related sharing use this object.

Note: The original territory management feature is scheduled for retirement for all customers as of Summer '21. After the feature is retired, users can't access the original territory management feature and its underlying data. We encourage you to migrate to Enterprise Territory Management. We also strongly recommend that you keep a comprehensive backup of your territory data while you're still using the original territory management feature. For more information, see The Original Territory Management Module Will Be Retired in the Summer '21 Release. The information in this topic applies to the original territory management feature only, and not to Enterprise Territory Management.

SEE ALSO:

Lead
LeadShare
LeadStatus
Metadata API Developer Guide: SharingRules

LeadShare

Represents a sharing entry on a Lead.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Summer '20 and later, only users with access to the Lead object can access this object.

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field	Details
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
LeadAccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the User or Group has to the Lead. The possible values are: • `Read` • `Edit` • `All` This value is not valid when creating or updating these records. This field must be set to an access level that is higher than the organization's default access level for leads.
LeadId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the Lead associated with this sharing entry. This field can't be updated.
RowCause	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can only write a value in this field when its value is either omitted or set to `Manual` (default). You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Values include: • `Manual`—The User or Group has access because a user with "All" access manually shared the Lead with them. • `Owner`—The User is the owner of the Lead. • `Rule`—The User or Group has access via a Lead sharing rule. • `GuestRule`—The User or Group has access via a Lead guest user sharing rule.

Field	Details
	• `LpuImplicit`—The User has access to records owned by high-volume Experience Cloud site users via a share group. • `ARImplicit`—The User, who belongs to a partner or customer account, has access to the Lead via an account relationship data sharing rule.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the User or Group that has been given access to the Lead. This field can't be updated.

Usage

This object allows you to determine which users and groups can view or edit leads owned by other users.

If you attempt to create a record that matches an existing record, the existing record is returned.

SEE ALSO:

AccountShare
Case
CaseShare
OpportunityShare

LeadStatus

Represents the status of a Lead, such as Open, Qualified, or Converted.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`ApiName`	**Type** string **Properties** Filter, Group, idLookup, Sort

Field	Details
	Description Uniquely identifies a picklist value so it can be retrieved without using an id or master label.
`IsConverted`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this lead status value represents a converted lead (`true`) or not (`false`). Multiple lead status values can represent a converted lead.
`IsDefault`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this is the default lead status value (`true`) or not (`false`) in the picklist.
`MasterLabel`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Master label for this lead status value. This display value is the internal label that does not get translated.
`SortOrder`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Number used to sort this value in the lead status picklist. These numbers are not guaranteed to be sequential, as some previous lead status values might have been deleted.

Usage

This object represents a value in the lead status picklist (see Lead Status Picklist). The lead status picklist provides additional information about the status of a Lead, such as whether a given status value represents a converted Lead. Query this object to retrieve the set of values in the lead status picklist, and then use that information while processing Lead objects to determine more information about a given lead. For example, the application could test whether a given lead is converted based on its `Status` value and the value of the `IsConverted` property in the associated LeadStatus record.

SEE ALSO:

LeadOwnerSharingRule

LeadShare

LeadTag

Associates a word or short phrase with a Lead.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ItemId`	**Type** reference **Properties** Create, Filter **Description** ID of the tagged item.
`Name`	**Type** string **Properties** Create, Filter **Description** Name of the tag. If this value does not already exist, a new TagDefinition is created and becomes the parent of this Tag object. Otherwise, a TagDefinition with the same name becomes the parent of this Tag object. Parent relationships are created automatically.
`TagDefinitionId`	**Type** reference **Properties** Filter **Description** ID of the parent TagDefinition object that owns the tag.

Field Name	Details
Type	**Type** picklist **Properties** Create, Filter, Restricted picklist **Description** Defines the visibility of a tag. Valid values: • `Public`—The tag can be viewed and manipulated by all users in an organization. • `Personal`—The tag can be viewed or manipulated only by a user with a matching `OwnerId`.

Usage

LeadTag stores the relationship between its parent TagDefinition and the Lead being tagged. Tag objects act as metadata, allowing users to describe and organize their data.

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

LegalEntity

Represents the way an organization is structured. An organization can be a single legal entity or it can comprise more than one legal entity. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
CompanyName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The name of the company that this legal entity represents.

Field	Details
Description	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The description of the legal entity.
LastReferencedDate	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, it's possible that this record was referenced (LastReferencedDate) and not viewed.
LegalEntityAddress	**Type** address **Properties** Filter, Nillable **Description** The address of the company that this legal entity represents. This is a compound field of type Address and combines these fields: LegalEntityCity, LegalEntityCountry, LegalEntityGeocodeAccuracy, LegalEntityLatitude, LegalEntityLongitude, LegalEntityPostalCode, LegalEntityState, and LegalEntityStreet. For more information, see Address Compound Fields.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the legal entity.
OwnerId	**Type** reference

Field	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the record owner.
`Status`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The status of the legal entity. Possible values are: • `Active` • `Inactive`

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

LegalEntityFeed
Feed tracking is available for the object.

LegalEntityHistory
History is available for tracked fields of the object.

LegalEntityOwnerSharingRule
Sharing rules are available for the object.

LegalEntityShare
Sharing is available for the object.

LightningExperienceTheme

Represents information for a theme in Lightning Experience. This object is available in API Version 42.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
DefaultBrandingSetId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the default branding set.
Description	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** The description of the theme. Limit: 1,000 characters.
DeveloperName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the theme in the API. This name can contain only underscores and alphanumeric characters and must be unique in your organization. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. The label corresponds to the theme name in the user interface. Limit: 70 characters. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
Language	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Required. Language of the label. Possible values are: • `da` (Danish) • `de` (German) • `en_US` (English) • `es` (Spanish) • `es_MX` (Spanish - Mexico)

Field	Details
	• fi (Finnish) • fr (French) • it (Italian) • ja (Japanese) • ko (Korean) • nl_NL (Dutch) • no (Norwegian) • pt_BR (Portuguese (Brazil)) • ru (Russian) • sv (Swedish) • th (Thai) • zh_CN (Chinese - Simplified) • zh_TW (Chinese - Traditional)
MasterLabel	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. The name of the theme. Specify up to 70 characters.
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, NamespacePrefix is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, NamespacePrefix is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.

Field	Details
ShouldOverrideLoadingImage	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether a custom image overrides the Salesforce loading image (`true`) or not (`false`).

LightningOnboardingConfig

Represents the feedback provided when users switch from Lightning Experience to Salesforce Classic. Admins can customize the question, how frequently the form appears, and where the feedback is stored in Chatter from the Adoption Assistance page in Lightning Experience Setup. Available in API version 47.0 and later.

See Switch to Salesforce Classic Feedback Form in Salesforce Help for more details.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
CollaborationGroupId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the Chatter Group where the user feedback is posted.
CustomQuestion	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Text of the custom question added by the admin. Maximum of 1,000 characters.
DeveloperName	**Type** string

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`FeedbackFormDaysFrequency`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The number of days between showing the feedback form when a user switches. A value of `0` indicates that the form is shown for every switch. Maximum of 30.
`IsCustom`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates if a feedback form includes a custom question `yes` or not `no`.
`Language`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates the language used in the org where the feedback form was created.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The master label for the prompt. Maximum of 80 characters.

Field	Details
PromptDelayTime	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates the amount of time in seconds to delay between instances of all prompts, both org- and Salesforce-created. Minimum of 0 hours and 0 minutes. Maximum of 99 hours and 59 minutes.
SendFeedbackToSalesforce	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates if the user feedback can be shared with Salesforce. If `yes`, share the feedback with Salesforce. If `no`, the feedback is only shared in the Chatter Group chosen when customizing the form. The default value is `false`.

LightningToggleMetrics

Represents users who switched from Lightning Experience back to Salesforce Classic. This object is available in API version 43.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Not available in sandbox orgs.

Fields

Field Name	Details
Action	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** User switched from Lightning Experience to Salesforce Classic or from Salesforce Classic to Lightning Experience.

Field Name	Details
MetricsDate	**Type** date **Properties** Filter, Group, Sort **Description** Date user switched.
RecordCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Number of user switches.
UserId	**Type** reference **Properties** Filter, Group, Sort **Description** UserId of user who switched.

LightningUsageByAppTypeMetrics

Represents number of users on Lightning Experience and Salesforce Mobile. This object is available in API version 43.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Not available in sandbox orgs.

Fields

Field Name	Details
AppExperience	**Type** string

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** User's app (Lightning Experience or Salesforce Mobile).
MetricsDate	**Type** date **Properties** Filter, Group, Sort **Description** Date user accessed Lightning Experience or Salesforce Mobile.
UserId	**Type** reference **Properties** Filter, Group, Sort **Description** UserId for user accessing Lightning Experience or Salesforce Mobile.

LightningUsageByBrowserMetrics

Represents Lightning Experience usage grouped by user's browser. This object is available in API version 43.0 and later.

Supported Calls

describeSObjects(), query(), retrieve()

Special Access Rules

Not available in sandbox orgs.

Fields

Field Name	Details
Browser	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description Browser used to access Lightning Experience.
MetricsDate	**Type** date **Properties** Filter, Group, Sort **Description** Date user accessed Lightning Experience.
PageName	**Type** string **Properties** Filter, Group, Sort **Description** Page user viewed in Lightning Experience.
TotalCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Total number of pages accessed in Lightning Experience.

LightningUsageByPageMetrics

Represents standard pages users viewed most frequently in Lightning Experience. This object is available in API version 43.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Not available in sandbox orgs.

Fields

Field Name	Details
MetricsDate	**Type** date **Properties** Filter, Group, Sort **Description** Date user viewed page in Lightning Experience.
PageName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of page user viewed.
TotalCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Total number of pages viewed.
UserId	**Type** reference **Properties** Filter, Group, Sort **Description** UserId of user who viewed page.

LightningUsageByFlexiPageMetrics

Represents custom pages users viewed most frequently in Lightning Experience. This object is available in API version 43.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Not available in sandbox orgs.

Fields

Field Name	Details
FlexiPageNameOrId	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name or Id of custom page user viewed in Lightning Experience.
FlexiPageType	**Type** string **Properties** Filter, Group, Sort **Description** Custom page type.
MetricsDate	**Type** date **Properties** Filter, Group, Sort **Description** Date user viewed page in Lightning Experience.
TotalCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Total number of custom pages viewed.

LightningExitByPageMetrics

.Represents standard pages users switched from Lightning Experience to Salesforce most frequently. This object is available in API version 44.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Not available in sandbox orgs.

Fields

Field Name	Details
MetricsDate	**Type** date **Properties** Filter, Group, Sort **Description** Date user viewed page in Lightning Experience.
PageName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of page user viewed.
RecordCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Total number of pages where the switch occured.
UserId	**Type** reference **Properties** Filter, Group, Sort **Description** UserId of user who viewed page.

LinkedArticle

Represents a knowledge article that is attached to a work order, work order line item, or work type. This object is available in API version 37.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Knowledge must be enabled in your org. Field Service must be enabled. Only users that have access to the Knowledge article and the parent record linked to it can access this object.

In Knowledge in Salesforce Classic, only Field Service objects such as Work Order, Work Type, and Work Order Line Item are supported for linked articles. In Lightning Knowledge, other social objects such as Chat, Messaging, Voice Call, and Social Post are supported for linked articles.

Fields

Field Name	Details
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only for orgs with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization.
`KnowledgeArticleId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the Knowledge article attached to the record. The label in the user interface is Knowledge Article ID.
`KnowledgeArticleVersionId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The version of the Knowledge article attached to the record. This field lists the title of the attached version and links to the version. The label in the user interface is Article Version. When you attach an article to a work order, that version of the article stays associated with the work order, even if later versions are published. If needed, you can detach and reattach an article to a work order to link the latest version.

Field Name	Details
LinkedEntityId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the record that the Knowledge article is attached to. The label in the user interface is Linked Record ID.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The title of the article. The label in the user interface is Article Title.
RecordTypeId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the article's record type, if used. This field is only available for Lightning Knowledge.
Type	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** (Read only) The type of record that the Knowledge article is attached to. For example, work order. The label in the user interface is Linked Object Type.

Usage

Admins can customize linked articles' page layouts, fields, validation rules, and more from the Linked Articles page in Setup.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

LinkedArticleFeed
Feed tracking is available for the object.

LinkedArticleHistory

History is available for tracked fields of the object.

LinkedArticleFeed

Represents the comment feed on a linked article. This object is available in API version 39.0 and later.

For additional information about feeds, see FeedItem on page 1432.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Knowledge must be enabled in your org.

Fields

Field	Details
`BestCommentId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the comment marked as best answer on a question post.
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The body of the feed item. Required when `Type` is `TextPost` or `AdvancedTextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. Although a value for `Body` is not required for the `ContentPost` type, an attachment is required. If an attachment isn't present, the type changes to `TextPost` or `AdvancedTextPost`, depending on the API version. `TextPost` and `AdvancedTextPost` do require a value for `Body`. Tip: See the `IsRichText` field for a list of HTML tags supported in the body of rich text posts.
`CommentCount`	**Type** int

Field	Details
	Properties Filter, Group, Sort **Description** The number of comments associated with this feed item.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this item to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the context user.
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. If you post a rich text feed comment using SOAP API, set `IsRichText` to `true` and escape HTML entities from the body. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<a>` • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only through the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>`

Field	Details
	Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of likes associated with this feed item.
`LinkUrl`	**Type** url **Properties** Nillable, Sort **Description** The URL of a `LinkPost`.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the object type to which the feed item is related. For example, set this field to a `UserId` to post to someone's profile feed, or an `AccountId` to post to a specific account.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion record associated with a `ContentPost`. For WDC thanks posts, it's the ID of the WorkThanks object associated with a `RypplePost`. This field is typically null for all posts except `ContentPost` and `RypplePost`. For example, set this field to an existing ContentVersion ID and post it to a feed with `Type` set to `ContentPost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort

Field	Details
	Description The title of the feed item. When the `Type` is `LinkPost`, the `LinkUrl` is the URL and this field is the link name. The `Title` field can be updated on posts of `Type` `QuestionPost`.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item. Except for `ContentPost`, `LinkPost`, and `TextPost`, don't create feed items of other types directly from the API. • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in WDC. • `TextPost`—a direct text entry on a feed.

Field	Details
	• `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `AttachArticleEvent`—generated event when a user attaches an article to a case. • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `CaseCommentPost`—generated event when a user adds a case comment for a case object. • `ChangeStatusPost`—generated event when a user changes the status of a case. • `ChatTranscriptPost`—generated event when Chat transcript is saved to a case. • `EmailMessageEvent`—generated event when an email related to a case object is sent or received. • `FacebookPost`—generated when a Facebook post is created from a case. Deprecated. • `MilestoneEvent`—generated when a case milestone is completed or reaches violation status. • `SocialPost`—generated when a social post is created from a case. Note: If you set `Type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.

LinkedArticleHistory

Represents the history of changes made to tracked fields on a linked article. This object is available in API version 37.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Special Access Rules

Knowledge must be enabled in your org.

Fields

Field Name	Details
`DataType`	**Type** picklist

Field Name	Details
	Properties Filter, Group, Nillable, Restricted picklist, Sort **Description** Data type of the field that was changed.
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`LinkedArticleId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the tracked linked article. The history is displayed on the detail page for this record.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The value of the field before it was changed.

ListEmail

Represents a list email sent from Salesforce, or sent from Pardot and synced to Salesforce. When the list email is sent, the recipients are generated by combining recipients in ListEmailIndividualRecipients and ListEmailRecipientSource. Duplicate and other invalid recipients are removed. The result is the recipients who are actually sent any given list email. Has a one-to-many relationship with ListEmailRecipientSource and ListEmailIndividualRecipient. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
CampaignId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the related campaign. This field is available in API version 42.0 and later.
ClickThroughRate	**Type** percent **Properties** Filter, Nillable, Sort **Description** The percentage of visitors who click links contained in emails delivered (sent minus bounces) to them. Multiple clicks for a same link are counted. This field is available in API version 41.0 and later. To access this field, your org must use Pardot and users need the CRM User or Sales User permission set.
ClickToOpenRatio	**Type** percent **Properties** Filter, Nillable, Sort **Description** The number of unique clicks divided by unique HTML opens. This field is available in API version 41.0 and later. To access this field, your org must use Pardot and users need the CRM User or Sales User permission set.
DeliveryRate	**Type** percent **Properties** Filter, Nillable, Sort

Field	Details
	Description The percentage of the emails that were delivered compared to the number that bounced (soft and hard). Note: this data includes emails that were delivered to the recipient's spam folder. This field is available in API version 41.0 and later. To access this field, your org must use Pardot and users need the CRM User or Sales User permission set.
`EmailContentId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the email content record associated with the list email. This field is available in API version 50.0 or later. To access this field, your org must use Pardot and users need the CRM User or Sales User permission set.
`FromAddress`	**Type** textarea **Properties** Create, Filter, Update **Description** Read-only except when list email is in draft state. Validated against user's addresses.
`FromName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Read-only except when list email is in draft state. Validated against user's addresses. This field is null for emails sent from Pardot.
`HasAttachment`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Read-only. Defaulted on create and update. Value is `true` if the list email has an attachment. This field is null for emails sent from Pardot.
`HtmlBody`	**Type** textarea

Field	Details
	Properties Create, Nillable, Update **Description** The body of the list email. This field is null for emails sent from Pardot. List emails can contain up to 32,000 characters for the body. These limits include visible characters and other characters in the email, including markup.
`IsTracked`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates if email tracking was on when the list email was sent. This field is blank for emails sent from Pardot and synced to Salesforce. This field is null for emails sent from Pardot.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp that indicates when the current user last viewed a record that is related to this list email. This field is null for emails sent from Pardot.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed. This field is null for emails sent from Pardot.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Read-only except when list email is in draft state.
`OpenRate`	**Type** percent

Field	Details
	Properties Filter, Nillable, Sort **Description** The percentage of unique HTML opens compared to the total number of emails delivered (sent minus bounces). This field is available in API version 41.0 and later. To access this field, your org must use Pardot and users need the CRM User or Sales User permission set.
`OptOutRate`	**Type** percent **Properties** Filter, Nillable, Sort **Description** The percentage of users that have opted out compared to the total number of emails sent. This field is available in API version 41.0 and later. To access this field, your org must use Pardot and users need the CRM User or Sales User permission set.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** References Group and User. This field is null for emails sent from Pardot.
`ProgramName`	**Type** string **Properties** Filter, Group, Nillable **Description** The name of an Engagement Studio program where an automated email originates. Reserved for future use. This field is available in API version 46.0 and later. To access this field, your org must use Pardot and users need the CRM User or Sales User permission set.
`ScheduledDate`	**Type** dateTime **Properties** CreateFilter, Nillable, Sort, Update **Description** Read-only. If null and `Status` is set to Scheduled, defaults to created time.

Field	Details
SentVia	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Indicates whether the email was sent from Salesforce or Pardot. The allowed values are `Salesforce` or `Pardot` or `MessagingService`. This field is available in API version 41.0 and later. To access this field, your org must use Pardot and users need the CRM User or Sales User permission set.
SpamComplaintRate	**Type** percent **Properties** Filter, Nillable, Sort **Description** The percentage of spam complaints compared to the total number emails sent. This field is available in API version 41.0 and later. To access this field, your org must use Pardot and users need the CRM User or Sales User permission set.
Status	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Read-only except when list email is in draft state. Changing the status to Scheduled causes the list email to be sent. Valid values: • `Draft` • `Scheduled` • `Sent` • `Limit Error` • `Cancelled`
Subject	**Type** textarea **Properties** Create, Filter, Nillable, Update **Description** Read-only except when list email is in draft state. This field is null for emails sent from Pardot.

Field	Details
	List emails can contain up to 3,000 characters for the subject. These limits include visible characters and other characters in the email, including markup.
TextBody	**Type** textarea **Properties** Create, Nillable, Update **Description** Read-only except when list email is in draft state. This field is null for emails sent from Pardot.
TotalDelivered	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The total number of emails minus hard and soft bounces. Note: this data includes emails that were delivered to the recipient's spam folder. This field is available in API version 41.0 and later. To access this field, your org must use Pardot and users need the CRM User or Sales User permission set.
TotalHardBounced	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** The total number of emails that permanently bounced back to the sender because the address is invalid. A hard bounce can occur because the domain name doesn't exist or because the recipient is unknown. This field is available in API version 41.0 and later. To access this field, your org must use Pardot and users need the CRM User or Sales User permission set.
TotalOpens	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** The total number of times a prospect’s email client loaded the images in the HTML version of the email. We also record an open if the prospect clicks a link within the HTML or text email without downloading images. A click indicates that they viewed the message. Some email clients (Outlook, Apple Mail, Thunderbird) do not display images by default. Pardot counts an open each time the images load.

Field	Details
	This field is available in API version 41.0 and later. To access this field. users need the High Velocity Sales User permission set or your org must use Pardot and users need the CRM User or Sales User permission set.
TotalSent	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** Read-only. The total number of list emails sent, including bounced, opted-out, and invalid To: addresses.
TotalSoftBounced	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** The total number of times a recipient’s mail server acknowledged the email, but returned it to the sender. Sometimes it is because the recipient's mailbox is full or the mail server is temporarily unavailable. A soft bounce message can sometimes be deliverable at another time. After 5 soft bounces, Pardot opts the prospect out of emails. This field is available in API version 41.0 and later. To access this field, your org must use Pardot and users need the CRM User or Sales User permission set.
TotalSpamComplaints	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** The total number of prospects that reported the email as spam. This field is available in API version 41.0 and later. To access this field, your org must use Pardot and users need the CRM User or Sales User permission set.
TotalTrackedLinkClicks	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** The number of times prospects clicked a link in the email. This field is available in API version 41.0 and later. To access this field, your org must use Pardot and users need the CRM User or Sales User permission set.

Field	Details
Type	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist **Description** The type of email sent: list email or automated email. Reserved for future use. This field is available in API version 46.0 and later. To access this field, your org must use Pardot and users need the CRM User or Sales User permission set.
UniqueClickThroughRate	**Type** percent **Properties** Filter, Nillable, Sort **Description** The percentage of visitors who clicked a link contained in an email. This field is available in API version 41.0 and later. To access this field, your org must use Pardot and users need the CRM User or Sales User permission set.
UniqueOpens	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** The number of prospects who loaded the images in the HTML version of the email. The Unique Opens category counts each recipient only one time, even if the prospect loaded images more than once. This field is available in API version 41.0 and later. To access this field, your org must use Pardot and users need the CRM User or Sales User permission set.
UniqueOptOuts	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** Unique opt-outs is the total number of prospects that have clicked the link to unsubscribe or opted out of all emails in the Email Preference Center. They are removed from future email sends. This field is available in API version 41.0 and later. To access this field, your org must use Pardot and users need the CRM User or Sales User permission set.

Field	Details
`UniqueTrackedLinkClicks`	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** The number of times a prospect clicked a link in the email. This metric doesn't include multiple clicks of the same link. This field is available in API version 41.0 and later. To access this field, your org must use Pardot and users need the CRM User or Sales User permission set.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ListEmailOwnerSharingRule
Sharing rules are available for the object.

ListEmailShare
Sharing is available for the object.

ListEmailIndividualRecipient

For a list email in Salesforce, represents a recipient. Each record represents a link from a list email to exactly one recipient for that list email. Recipients can be contacts, leads, or campaign members. Has a one-to-many relationship with ListEmail.This object is available in API version 44.0 and later.

The visibility and accessibility of this object is inherited from the related list email.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Possible values are:

Field	Details
	• EUR (Euro) • INR (Indian Rupee) • USD (US Dollars)
ListEmailId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The related list email record. Required on record creation; read-only otherwise.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The auto-generated name of the list email recipient source.
RecipientId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** the contact, lead, person account, or campaign member ID of the individual list email recipient.

Usage

ListEmailRecipientSource

For a list email in Salesforce, represents the dynamically defined sources of recipient email addresses. Each record represents a link to a single list view or campaign that is examined when the list email is sent. Has a one-to-many relationship with ListEmail. This object is available in API version 41.0 and later.

The visibility and accessibility of this object is inherited from the related list email.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `getDeleted()`, `getUpdated()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
ListEmailId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The related list email record. Required on record creation; read-only otherwise.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The auto-generated name of the list email recipient source.
SourceListId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Required. The id of a list view to send the list email to. Read-only except when list email is in draft state.
SourceType	**Type** reference **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. Read-only except when list email is in draft state. Valid values: • Include

ListView

Represents a list view. A list view specifies a set of records for an object, based on specific criteria. This object is available in API version 32.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`, `search()`

Fields

Name	Details
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The fully qualified developer name of the list view.
`IsSoqlCompatible`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Whether the list view can be used with SOQL..
`LastModifiedBy`	**Type** User **Properties** Filter, Sort **Description** The name of the user who last modified the list view.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time when the list view was last referenced, with a precision of one second.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time when the list view was last viewed, with a precision of one second.

Name	Details
Name	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The name of the list view.
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace of the list view.
SobjectType	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The API name of the sObject for the list view.

ListViewChart

Represents a graphical chart that's displayed on Salesforce for Android, iOS, and mobile web list views. The chart aggregates data that is filtered based on the list view that's currently displayed. This object is available in API version 33.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Name	Description
AggregateField	**Type** picklist **Properties** Create, Filter, Group, Nillable, Query, Restricted picklist, Retrieve, Sort, Update

Name	Description
	Description The field that's used for calculating data on each group. `AggregateField` can't be the same as `GroupingField`.
`AggregateType`	**Type** picklist **Properties** Create, Filter, Group, Query, Restricted picklist, Retrieve, Sort, Update **Description** The type of calculations to run on each group. The supported `AggregateType` values are `Count`, `Sum`, and `Avg`.
`ChartType`	**Type** picklist **Properties** Create, Filter, Group, Query, Restricted picklist,Retrieve, Sort, Update **Description** The type of chart to create. The supported chart types are horizontal bar chart, vertical bar chart, and donut chart.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Query, Retrieve, Sort, Update **Description** The fully qualified developer name of the chart.
`GroupingField`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Query, Restricted picklist, Retrieve, Sort, Update **Description** The field that's used to divide the data into collections. The field has to be supported by SOQL `GROUP BY` functionality. `GroupingField` can't be the same as `AggregateField`.
`Language`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the `MasterLabel`.

Name	Description
MasterLabel	**Type** string **Properties** Create, Filter, Group, Query, Retrieve, Sort, Update **Description** The label for the chart.
OwnerId	**Type** reference **Properties** Create, Filter, Group, Query, Retrieve, Sort, Update **Description** The ID of the user who owns the chart.
SobjectType	**Type** picklist **Properties** Create, Filter, Group, Query, Restricted picklist, Retrieve, Sort **Description** The API name of the sObject for the chart.

ListViewChartInstance

Retrieves metadata for all standard and custom charts for a given entity in context of a given list view. This object is available in API versions 34.0 and later.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field Name	Details
AggregateField	**Type** string **Properties** Filter, Group, Sort

Field Name	Details
	Description The field that's used for calculating data on each group. `AggregateField` can't be the same as `GroupingField`.
`AggregateType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of calculations to run on each group. The supported `AggregateType` values are `Count`, `Sum`, and `Avg`.
`ChartType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of chart to create. The supported chart types are horizontal bar chart, vertical bar chart, and donut chart.
`DataQuery`	**Type** textarea **Properties** Filter, Nillable, Sort **Description** The SOQL query that can be executed to fetch the data for drawing a chart.
`DataQueryWithoutUserFilters`	**Type** textarea **Properties** Filter, Nillable, Sort **Description** The SOQL query that can be executed to fetch the data for drawing a chart, without user filters. Available in API v43.0 and later.
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort

Field Name	Details
	Description API name of the chart. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`ExternalId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Reserved for future use.
`GroupingField`	**Type** string **Properties** Filter, Group, Sort **Description** The field that's used to divide the data into collections. The field has to be supported by SOQL `GROUP BY` functionality. `GroupingField` can't be the same as `AggregateField`.
`IsDeletable`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates if the chart can be deleted.
`IsEditable`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates if the chart can be edited. Standard charts are not editable.

Field Name	Details
`IsLastViewed`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates if a chart is the last viewed by a user.
`Label`	**Type** string **Properties** Filter, Group, Sort **Description** The display name of the chart.
`ListViewChartId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the chart created by a user. For standard charts, this is null.
`ListViewContextId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the list view in context of which the chart is generated. Required to query `ListViewChartInstance`.
`SourceEntity`	**Type** string **Properties** Filter, Group, Sort **Description** API name of the entity to which the chart is related. Required to query `ListViewChartInstance`.

Usage

Example 1. Retrieve all custom and standard charts for Account entity for All Accounts list view

```
SELECT AggregateField, AggregateType, ChartType, DataQuery, DeveloperName, ExternalId,
 GroupingField, Id, IsDeletable, IsEditable, IsLastViewed, Label, ListViewChartId,
ListViewContextId, SourceEntity FROM ListViewChartInstance WHERE SourceEntity='Account'
 and ListViewContextId='00BR0000000U8Hr'
```

Example 2. Retrieve metadata for a specific custom chart by ID for Account entity and All Accounts list view

```
SELECT AggregateField, AggregateType, ChartType, DataQuery, DeveloperName, ExternalId,
 GroupingField, Id, IsDeletable, IsEditable, IsLastViewed, Label, ListViewChartId,
ListViewContextId, SourceEntity FROM ListViewChartInstance WHERE SourceEntity='Account'
 and ListViewContextID='00BR0000000U8Hr' and ListViewChartId='0DdR00000004CBxKAM'
```

Example 3. Retrieve metadata for a specific standard chart by its developer name for Account entity and All Accounts list view

```
SELECT AggregateField, AggregateType, ChartType, DataQuery, DeveloperName, ExternalId,
 GroupingField, Id, IsDeletable, IsEditable, IsLastViewed, Label, ListViewChartId,
ListViewContextId, SourceEntity FROM ListViewChartInstance WHERE SourceEntity='Account'
 and ListViewContextID='00BR0000000U8Hr' and DeveloperName='AccountsByIndustry'
```

LiveAgentSession

This object is automatically created for each Chat session and stores information about the session. This object is available in API versions 28.0 and later.

Note: Standard fields for the LiveAgentSession object can only be modified if your administrator has given you editing permissions for these records.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`

Fields

Field Name	Details
`AgentId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the agent associated with the session.

Field Name	Details
ChatReqAssigned	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The number of chat requests that were assigned to an agent during a session.
ChatReqDeclined	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The number of chat requests that were declined by an agent during a session.
ChatReqEngaged	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The number of chats in which an agent was engaged during a session.
ChatReqTimedOut	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The number of chat requests that timed out in an agent's queue during a session.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the session record was last referenced.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the session record was last viewed.

Field Name	Details
LoginTime	**Type** dateTime **Properties** Create, Filter, Sort, Update **Description** The date and time an agent logged in during the session.
LogoutTime	**Type** dateTime **Properties** Create, Filter, Sort, Update **Description** The date and time an agent logged out during a session.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookupSort **Description** The name of the session.
NumFlagLoweredAgent	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The number of assistance flags lowered by the agent.
NumFlagLoweredSupervisor	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The number of assistance flags lowered by the supervisor.
NumFlagRaised	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The number of assistance flags raised by the agent.

Field Name	Details
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner of the session record.
TimeAtCapacity	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The amount of time an agent spent with the maximum number of chats in his or her queue.
TimeIdle	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The amount of time an agent spent idle during the session.
TimeInAwayStatus	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The amount of time an agent spent with a status of "Away" during a session.
TimeInChats	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The amount of time an agent spent engaged in chats during a session.
TimeInOnlineStatus	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description The amount of time an agent spent with a status of “Online” during a session.

Usage

Use this object to query and manage chat session records.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

LiveAgentSessionHistory
History is available for tracked fields of the object.

LiveAgentSessionOwnerSharingRule
Sharing rules are available for the object.

LiveAgentSessionShare
Sharing is available for the object.

LiveAgentSessionHistory

This object is automatically created for each Chat session and stores information about changes made to the session. This object is available in API versions 28.0 and later.

Note: Standard fields for the LiveAgentSession object can only be modified if your administrator has given you editing permissions for these records.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Fields

Field Name	Details
`DataType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Data type of the field that was changed.

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed in a session record.
`LiveAgentSessionId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the session record that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The original value of the field that was changed.

Usage

Use this object to identify changes to chat session records.

LiveAgentSessionShare

This object is automatically created for each Chat session and stores information about the session. This object is available in API versions 28.0 and later.

Note: Standard fields for the LiveAgentSession object can only be modified if your administrator has given you editing permissions for these records.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the User or Group has to the LiveAgentSession. The possible values are: • `Read` • `Edit` • `All` (This value is not valid for `create()` or `update()` calls.) This value must be set to an access level that is higher than the organization's default access level for chat transcripts.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the parent object, if any.
`RowCause`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Values can include: • `Manual`—The User or Group has access because a user with "All" access manually shared the LiveAgentSession with them. • `Owner`—The User is the owner of the LiveAgentSession or is in a role above the LiveAgentSession owner in the role hierarchy.

Field Name	Details
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group that has been given access to the LiveAgentSession.

Usage

This object lets you determine which users and groups can view and edit LiveAgentSession records owned by other users.

If you attempt to create a new record that matches an existing record, the `create()` call updates any modified fields and returns the existing record.

LiveChatBlockingRule

Represents a rule for blocking chat visitors' IP addresses from starting new chats with agents. This object is available in API version 34.0 and later.

Supported Calls

`create()`, `delete()`, `query()`, `update()`, `retrieve()`

Fields

Field Name	Details
Description	**Type** string **Properties** Create, Nillable **Description** The description of the blocking rule—for example, the reason why the given IP address or range of addresses is being banned from starting new chats.
DeveloperName	**Type** string **Properties** Create, Filter, Group, Sort **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with

Field Name	Details
	a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`FromIpAddress`	**Type** string **Properties** Create, Filter, Group, Sort **Description** The IP address of the user that you want to block, or the beginning of the range of IP addresses you want to block. If you want to block a range of IP addresses, indicate the end of the range in the `ToIpAddress` field. If you don't indicate an IP address in the `ToIpAddress` field, the only IP address that will be blocked is the IP address in the `FromIpAddress` field.
`Language`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The language of the blocking rule.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort **Description** Label for the blocking rule.
`ToIpAddress`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** (Optional) The end of the range of IP addresses that you want to block. The range begins with and includes the IP address in the `FromIpAddress` field, and it ends with and includes the IP address in the `ToIpAddress` field.

Usage

Use this object to query and manage rules for blocking customers from starting new chats with agents.

LiveChatButton

Represents a button that allows visitors to request chats with Chat users. This object is available in API version 24.0 and later.

Supported Calls

`create()`, `query()`, `update()`, `retrieve()`

Fields

Field Name	Details
`Animation`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of animation used when an automated chat invitation appears on-screen. For automated chat invitations only. Available in API version 29.0 and later.
`AutoGreeting`	**Type** textarea **Properties** Create, Filter, Nillable, Sort **Description** The text that is automatically sent from an agent to a visitor when a chat session starts. Note: A greeting message in the `AutoGreeting` field of the LiveChatButton object overrides individual users' greeting messages in the `AutoGreeting` field in the LiveChatUserConfig object.
`ChasitorIdleTimeout`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort **Description** The amount of time a customer has to respond to an agent message before the chat times out.

Field Name	Details
`ChasitorIdleTimeoutWarning`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort **Description** The amount of time a customer has to respond to an agent message before a warning appears and a timer begins a countdown. This value must be shorter than the `ChasitorIdleTimeout` value (we recommend at least 30 seconds shorter).
`ChatPageId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The record ID of the custom Visualforce page that contains the custom chat window code.
`CustomAgentName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** The custom name of the agent associated with the button. Available in API version 29.0 and later. Note: A custom agent name in the `CustomAgentName` field of the LiveChatButton object overrides individual users' custom agent name in the `CustomAgentName` field in the LiveChatUserConfig object.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization.

Field Name	Details
	Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`HasQueue`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Determines whether to allow incoming chat requests to queue until an agent is available.
`InviteEndPosition`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The position on-screen where an automated chat invitation's animation ends. **Note:** You don't need to select an end position for your automated chat invitation if you use a custom animation. For automated chat invitations only. Available in API version 29.0 and later.
`InviteImageId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The record ID of the static image resource displayed on your automated chat invitation. For automated chat invitations only. Available in API version 29.0 and later.
`InviteStartPosition`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The position on-screen where an automated chat invitation's animation begins. **Note:** You don't need to select a start position for your automated chat invitation if you use a custom animation. For automated chat invitations only. Available in API version 29.0 and later.

Field Name	Details
IsActive	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** For automated chat invitations, specifies whether an automated chat invitation is active and able to be sent to customers (`true`) or not (`false`). For chat buttons, this is set to `true` by default.
Language	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The language of the chat.
MasterLabel	**Type** string **Properties** Create, Filter, Group, Sort **Description** Label for the chat button.
NumberOfReroutingAttempts	**Type** int **Properties** Create, Filter, Group, Nillable, Sort **Description** Specifies the number of times a chat request can be rerouted to available agents if all agents reject the chat request.
OfflineImageId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The record ID of the static image resource that is displayed when the button is offline (inactive).
OnlineImageId	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort **Description** The record ID of the static image resource that is displayed when the button is online (active).
`OptionsHasChasitorIdleTimeout`	**Type** boolean **Properties** Create, Filter **Description** Specifies whether Customer Time-Out is enabled.
`OptionsHasInviteAfterAccept`	**Type** boolean **Properties** Create, Filter **Description** Specifies whether an automated chat invitation can be sent to a customer after that customer has accepted a prior automated chat invitation (`true`) or not (`false`). For automated chat invitations only. Available in API version 29.0 and later.
`OptionsHasInviteAfterReject`	**Type** boolean **Properties** Create, Filter **Description** Specifies whether an automated chat invitation can be sent to a customer after that customer has rejected a prior automated chat invitation (`true`) or not (`false`). For automated chat invitations only. Available in API version 29.0 and later.
`OptionsHasRerouteDeclinedRequest`	**Type** boolean **Properties** Create, Filter **Description** Specifies whether a chat request that has been rejected by all available agents should be rerouted to available agents again (`true`) or not `false`).

Field Name	Details
OptionsIsAutoAccept	**Type** boolean **Properties** Create, Filter **Description** Specifies whether a chat request should be automatically accepted by the agent it's assigned to (`true`) or not `false`). For chat buttons and automated chat invitations with `RoutingType` set to `Most Available` or `Least Active`. Available in API version 30.0 and later.
OptionsIsInviteAutoRemove	**Type** boolean **Properties** Create, Filter **Description** Specifies whether an automated chat invitation should be automatically removed from the screen after a certain amount of time (`true`) or not (`false`). For automated chat invitations only. Available in API version 29.0 and later.
OverallQueueLength	**Type** int **Properties** Create, Filter, Group, Nillable, Sort **Description** The maximum number of chat requests allowed to queue.
PerAgentQueueLength	**Type** int **Properties** Create, Filter, Group, Nillable, Sort **Description** The maximum number of chat requests allowed to queue for each agent with the required skill.
PostchatPageId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The record ID of the custom Visualforce page displayed when the chat ends.

Field Name	Details
PostchatUrl	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** The URL the user is directed to after the chat ends.
PrechatFormPageId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The record ID of the custom Visualforce page displayed before the chat begins.
PrechatFormUrl	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** The URL the user is directed to before the chat begins.
PushTimeout	**Type** int **Properties** Create, Filter, Group, Nillable, Sort **Description** The number of seconds an agent has to answer a chat request before it's routed to the next available agent.
QueueId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The record ID of the queue used for this chat button.
RoutingConfigurationId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort

Field Name	Details
	Description The record ID of the routing configuration used for this chat button.
RoutingType	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** How chat requests are routed to agents. The values are: • `Choice`—Incoming chat requests are added to the queue in Live Agent in the Salesforce console and are available to any agent with the required skill. • `Least Active`—Incoming chats are routed to the agent with the required skill who has the fewest active chats. • `Most Available`—Incoming chats are routed to the agent with the required skill and the greatest difference between chat capacity and active chat sessions. For example, if Agent A and Agent B each have a chat capacity of five, and Agent A has three active chat sessions while Agent B has one, incoming chats will be routed to Agent B. • `Omni`—Incoming chats are routed using Omni-Channel queues.
SiteId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The record ID of the site used for loading static resources and custom Visualforce pages.
SkillId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The record ID of the skill used to route incoming chat requests. To associate multiple skills with a chat button, reference one skill in the `SkillId` field and use LiveChatButtonSkill junction objects for the remaining skills.
TimeToRemoveInvite	**Type** int **Properties** Create, Filter, Group, Nillable, Sort

Field Name	Details
	Description The number of seconds an automated invitation stays on-screen before it is automatically removed. For automated chat invitations only. Available in API version 29.0 and later.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The type of element to display to customers (either a chat button or an automated invitation).
`WindowLanguage`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The language used for standard chat windows. Custom chat windows use the language of the user's browser.

Usage

Use this object to query and manage chat buttons and automated chat invitations.

LiveChatButtonDeployment

Associates an automated chat invitation with a specific deployment. This object is available in API versions 28.0 and later.

Supported Calls

`create()`, `delete()` `query()`, `update()`, `retrieve()`

Fields

Field Name	Details
`ButtonId`	**Type** reference **Properties** Create, Filter, Group, Sort

Field Name	Details
	Description The ID of the automated invitation associated with the deployment.
DeploymentId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the deployment that will feature the automated invitation.

Usage

Use this object to associate automated chat invitations with specific deployments.

LiveChatButtonSkill

Represents all the skills available to a LiveChatButton except the one currently assigned. To retrieve the skill currently assigned, query LiveChatButton. This object is available in API version 25.0 and later.

Supported Calls

`create()`, `delete()`, `update()`, `query()`

Fields

Field Name	Details
ButtonID	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The record ID of the button.
SkillID	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The record ID of the skill.

Usage

Use this object to assign a specific skill to a specific button for multi-skill routing. For example:

```
String myButtonId = "button_Id";
String myButtonDevName = "button_DeveloperName";
List<String> skillIds = new List<String>();

//Get one skill ID from button
for(LiveChatButton lcb : [SELECT SkillId FROM LiveChatButton WHERE DeveloperName =:
myButtonDevName]) {
    skillIds.add(lcb.SkillId);
}
//Get remaining skills from LiveChatButtonSkill join object
for(LiveChatButtonSkill lcbs : [SELECT SkillID FROM LiveChatButtonSkill WHERE ButtonId =:
myButtonId]) {
    skillIds.add(lcbs.SkillId);
}
//Retrieve all skills into a single list
List<Skill> skills = [SELECT Id, DeveloperName FROM Skill WHERE Id IN :SkillIds];
```

LiveChatDeployment

Represents the general settings for deploying Live Agent on a website. This object is available in API version 24.0 and later.

Supported Calls

`create()`, `query()`, `update()`, `retrieve()`

Fields

Field Name	Details
`BrandingId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The record ID of the static image resource that's displayed in the chat window
`ConnectionTimeoutDuration`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort **Description** Indicates the amount of time before the chat times out, in seconds.

Field Name	Details
ConnectionWarningDuration	**Type** int **Properties** Create, Filter, Group, Nillable, Sort **Description** Indicates the amount of time before a time-out warning is displayed to the agent, in seconds.
DeveloperName	**Type** string **Properties** Create, Filter, Group, Sort **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object’s name in a managed package and the changes are reflected in a subscriber’s organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
Domains	**Type** textarea **Properties** Create, Filter (unavailable in API version 25.0 and later), Nillable, Sort (unavailable in API version 25.0 and later) **Description** A comma-separated list of domains the deployment is allowlisted for. Leave this blank to allow the deployment to be used on any domain.
HasTranscriptSave	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Determines whether visitors can download and save transcripts from the chat window

Field Name	Details
Language	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The language of the deployment
MasterLabel	**Type** string **Properties** Create, Filter, Group, Sort **Description** The name of the deployment
MobileBrandingId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The record ID of the static image resource displayed in the mobile version of the chat window
OptionsHasPrechatApi	**Type** boolean **Properties** Create, Filter **Description** Determines whether developers can access the Pre-Chat API
SiteId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The record ID of the site used for loading static resources
WindowTitle	**Type** string **Properties** Create, Filter, Group, Sort

Field Name	Details
	Description The text displayed in the title bar of the browser window used to launch the chat window

Usage

Use this object to query and manage live chat deployments.

LiveChatSensitiveDataRule

Represents a rule for masking or deleting data of a specified pattern. Written as a regular expression (regex). This object is available in API version 35.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `update()`, `retrieve()`

Special Access Rules

As of Summer '20 and later, only authenticated internal and external users can access this object.

Fields

Field Name	Details
`ActionType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The action to take on the text (remove or replace) when the sensitive data rule is triggered.
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** The description of the sensitive data rule—for example, "Block social security numbers."

Field Name	Details
DeveloperName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
EnforceOn	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** Determines the roles on which the rule is enforced. The value is determined using bitwise OR operation. There are seven possible values: **1.** Rule enforced on Agent **2.** Rule enforced on Visitor **3.** Rule enforced on Agent and Visitor **4.** Rule enforced on Supervisor **5.** Rule enforced on Agent and Supervisor **6.** Rule enforced on Visitor and Supervisor **7.** Rule enforced on Agent, Visitor, and Supervisor
IsEnabled	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Specifies whether a sensitive data rule is active (`true`) or not (`false`). Default value (if none is provided) is `false`.

Field Name	Details
Language	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the sensitive data rule.
MasterLabel	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label for the sensitive data rule.
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, NamespacePrefix is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, NamespacePrefix is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
Pattern	**Type** textarea **Properties** Create, Update **Description** The pattern of text blocked by the rule. Written as a JavaScript regular expression (regex).

Field Name	Details
Priority	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates the priority level of a Chat.
Replacement	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The string of characters that replaces the blocked text (if `ActionType` *`Replace`* is selected).

Usage

Use this object to mask or delete data of specified patterns, such as credit card, social security, phone and account numbers, or even profanity.

LiveChatTranscript

This object is automatically created for each Live Agent chat session and stores information about the session. This object is available in API version 24.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
Abandoned	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The amount of time in seconds an incoming chat request remained unanswered by an agent before the chat was disconnected by the customer.

Field Name	Details
AccountId	**Type** ID **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the account associated with the chat transcript.
AverageResponseTimeOperator	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The agent's average response time (in seconds) to chat messages from the visitor.
AverageResponseTimeVisitor	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The visitor's average response time (in seconds) to chat messages from the agent.
Body	**Type** textarea **Properties** Create, Nillable, Update **Description** The contents of the chat.
Browser	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The browser the visitor used for the chat.
BrowserLanguage	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The language of the visitor's browser.

Field Name	Details
`CaseID`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the case associated with the chat transcript.
`ChatDuration`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The total duration of the chat in seconds.
`ChatKey`	**Type** string **Properties** Create, Filter, Group, idLookup, Nillable, Sort **Description** The session ID of the chat before it is persisted. `ChatKey` can be used with advanced integrations in the Salesforce console. This field is available in API version 25.0 and later.
`ContactID`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the contact associated with the chat transcript.
`EndedBy`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The way the chat was ended: by the operator, the visitor, or the system.
`EndTime`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update

Field Name	Details
	Description The time the chat ended.
`IpAddress`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** The visitor's IP address.
`IsChatbotSession`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Whether the visitor is chatting with a Chatbot (`true`) or not (`false`).
`LastReferencedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`LeadID`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the lead associated with the chat transcript.

Field Name	Details
`LiveChatButtonID`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the LiveChatButton the chat session originated from.
`LiveChatDeploymentID`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the LiveChatDeployment the chat session originated from.
`LiveChatVisitorID`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the visitor associated with the chat transcript.
`Location`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The best-guess approximation of the visitor's location.
`MaxResponseTimeOperator`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The maximum time in seconds it took an agent to respond to a chat visitor's message.
`MaxResponseTimeVisitor`	**Type** int **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The maximum time in seconds it took a customer to respond to an agent's message.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name of the transcript.
OperatorMessageCount	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The number of messages sent by agent(s) during the chat.
OwnerID	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the operator who participated in the chat last; for missed chats, this is a system user.
Platform	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The visitor's operating system platform.
ReferrerUri	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Where the chat request originated.
RequestTime	**Type** dateTime

Field Name	Details
	Properties Create, Filter, Nillable. Sort, Update **Description** The time the visitor requested the chat.
ScreenResolution	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The visitor's screen resolution.
SkillId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The record ID of the primary Skill associated with the LiveChatButton the chat session originated from. To associate multiple skills with a LiveChatTranscript, use LiveChatTranscriptSkill junction objects.
StartTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The time the chat started.
Status	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The final status of the chat: completed, missed, dropped or blocked.
SupervisorTranscriptBody	**Type** textarea **Properties** Create, Nillable, Update **Description** The text body of the supervisor's chat transcript.

Field Name	Details
UserAgent	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The visitor’s user agent string.
VisitorMessageCount	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The number of messages sent by the visitor during the chat.
VisitorNetwork	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The network or service provider the chat visitor used for the chat.
WaitTime	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The total amount of time in seconds a chat request was waiting to be accepted by an agent.

Usage

Use this object to query and manage live chat transcripts.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

LiveChatTranscriptFeed (API version 47.0)
Feed tracking is available for the object.

LiveChatTranscriptHistory
History is available for tracked fields of the object.

LiveChatTranscriptOwnerSharingRule (API version 29.0)
Sharing rules are available for the object.

LiveChatTranscriptShare
Sharing is available for the object.

LiveChatTranscriptEvent

Captures specific events that occur over the lifetime of a chat. This object is available in API version 24.0 and later.

Supported Calls

`create()`, `delete()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
AgentId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the agent associated with the event.
Detail	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** Details associated with the event.
LastReferencedDate	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
LastViewedDate	**Type** date

Field Name	Details
	Properties Filter, Nillable, Sort, Update **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (`LastReferencedDate`) but not viewed it.
`LiveChatTranscriptId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the live chat transcript associated with the event.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name of the event.
`Time`	**Type** dateTime **Properties** Create, Filter, Sort **Description** The time at which the event happened.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The kind of event that occurred. • `Accept`—Accepted • `AgentBlocked`—Blocked by Agent • `AlertCriticalWaitChat`—Critical Wait Alert Time Reached • `CancelBlocked`—Cancel (Blocked) • `CancelNoAgent`—Cancel (No Agent) • `CancelNoQueue`—Cancel (No Queue) • `CancelVisitor`—Canceled by Visitor

Field Name	Details
	• `ChasitorIdleTimeout`—Visitor Idle Time-Out • `ChasitorIdleTimeoutWarningCleared`—Visitor Idle Time-Out Warning Cleared • `ChasitorIdleTimeoutWarningTriggered`—Visitor Idle Time-Out Warning Appeared • `ChatRequest`—Chat Requested • `ChatResumedAfterTransfer`—Chat resumed • `ChatbotEndChat`—Chatbot end chat • `ChatbotEndedChatByAction`—Conversation ended by automated action • `ChatbotEstablished`—Accepted by Chatbot • `ChatbotNotEstablished`—Chatbot Request Failed • `ChoiceRoute`—Routed (Choice) • `ClearCriticalWaitChat`—Critical Wait Alert Cleared • `ConferenceRequest`—Chat Conference Requested • `ConferenceRequestCanceled`—Chat Conference Canceled • `ConferenceRequestDeclined`—Chat Conference Declined • `DeclineManual`—Decline (Manual) • `DeclineTimeout`—Decline (Timeout) • `EndAgent`—Ended by Agent • `EndVisitor`—Ended by Visitor • `Enqueue`—Queued • `FileCanceledAgent`—File Transfer Canceled by Agent • `FileCanceledChasitor`—File Transfer Canceled by Visitor • `FileTransferFailure`—File Transfer Failure • `FileTransferRequested`—File Transfer Requested by Agent • `FileTransferSuccess`—File Transfer Success • `FileTransferToChasitor`—File Transfer Initiated by Agent • `FlagLoweredAgent`—Flag Lowered by Agent • `FlagLoweredSupervisor`—Flag Lowered by Supervisor • `FlagRaised`—Flag Raised • `LeaveAgent`—Agent Left • `LeaveVisitor`—Visitor Left • `OperatorJoinedConference`—Agent Joined Conference • `OperatorLeftConference`—Agent Left Conference • `Other` • `PushAssignment`—Routed (Push) • `SensitiveDataAgent`—Sensitive data blocked (Agent) • `SensitiveDataSupervisor`—Sensitive data blocked (Supervisor)

Field Name	Details
	• `SensitiveDataVisitor`—Sensitive data blocked (Visitor) • `Transfer`—Transfer Accepted • `TransferCancelled`—Transfer Request Canceled • `TransferDeclined`—Transfer Request Declined • `TransferRequest`—Transfer Requested • `TransferToBotFailed`—Transfer to bot failed • `TransferToButtonFailed`—Transfer to button failed • `TransferToQueueFailed`—Transfer to queue failed • `TransferredToBot`—Transferred to bot • `TransferredToButton`—Transferred to button • `TransferredToQueue`—Transferred to queue • `TransferredToSbrSkill`—Transferred to skill • `TransferredToSbrSkillFailed`—Transfer to skill failed • `Unassigned`

Usage

Use this object to query and manage live chat transcript events.

Note: LiveChatTranscriptEvent records are inserted after the chat is closed and the LiveTranscript record updated). However, the trigger on the LiveChatTranscriptEvent sObject fires separately on each LiveChatTranscriptEvent record within the same transaction.

All the LiveChatTranscriptEvent records are inserted in a single transaction but one by one. For example, the trigger is executed for each individual record.

```
trigger LCTE on LiveChatTranscriptEvent (before insert) {
     // Trigger.New will have only 1 record at a time and trigger will execute for
individual record
     for(LiveChatTranscriptEvent l : Trigger.New)
     system.debug(l.Type + '>>' +l.Detail);
     }
```

To avoid hitting any governors and limits, design your functionality considering this behavior. You can execute the logic by filtering the records based on the `Type` field of LiveChatTranscriptEvent.

LiveChatTranscriptShare

Represents a sharing entry on a LiveChatTranscript object. This object is available in API version 24.0 and later.

Supported Calls

`create()`, `delete()`, `query()`, `retrieve()update()`, `upsert()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field Name	Details
AccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the User or Group has to the LiveChatTranscript. The possible values are: • `Read` • `Edit` • `All` (This value is not valid for `create()` or `update()` calls.) This value must be set to an access level that is higher than the organization's default access level for live chat transcripts.
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the parent object, if any
RowCause	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Values may include: • `Manual`—The User or Group has access because a user with "All" access manually shared the LiveChatTranscript with them. • `Owner`—The User is the owner of the LiveChatTranscript or is in a role above the LiveChatTranscript owner in the role hierarchy.
UserOrGroupID	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** ID of the User or Group that has been given access to the LiveChatTranscript .

Usage

This object lets you determine which users and groups can view and edit LiveChatTranscript records owned by other users.

If you attempt to create a new record that matches an existing record, the `create()` call updates any modified fields and returns the existing record.

LiveChatTranscriptSkill

Represents a join between LiveChatTranscript and Skill. This object is available in API version 25.0 and later.

Supported Calls

`create()`, `delete()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`

Fields

Field Name	Details
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name of the transcript.
`SkillId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The record ID of the skill.
`TranscriptId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** The record ID of the transcript.

Usage

Use this object to assign a specific skill to a specific transcript for multi-skill routing.

LiveChatUserConfig

Represents a setting that controls the console settings for Chat users. This object is available in API version 24.0 and later.

Supported Calls

`create()`, `delete()`, `update()`, `query()`, `retrieve()`

Special Access Rules

As of Summer '20 and later, only authenticated internal and external users can access this object.

Fields

Field Name	Details
`AutoGreeting`	**Type** textarea **Properties** Create, Nillable **Description** The text that is automatically sent from an agent to a visitor when a chat session starts.
`Capacity`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort **Description** Limits the number of active chat session an agent can engage in.

Field Name	Details
CriticalWaitTime	**Type** int **Properties** Create, Filter, Group, Nillable, Sort **Description** The amount of time before a chat flashes to alert an agent to answer it.
CustomAgentName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** The custom name of the agent associated with the Live Agent configuration.
DeveloperName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
HasLogoutSound	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Determines whether a sound plays when an agent logs out of the console.
HasNotifications	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort

Field Name	Details
	Description Determines whether desktop notifications are enabled for the configuration. Available in API version 25.0 and later.
HasRequestSound	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Determines whether a sound plays when a chat request comes in.
HasSneakPeek	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Determines whether an agent sees a real-time preview of the messages a visitor types.
IsAutoAwayOnDecline	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Determines whether agents' status is automatically changed to Away when they decline a chat request. Available in API version 26.0 and later.
Language	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The language of the configuration.
MasterLabel	**Type** string **Properties** Create, Filter, Group, Sort **Description** The name of the configuration.

Field Name	Details
OptionsHasAgentFileTransfer	**Type** boolean **Properties** Create, Filter **Description** Determines whether agents can initiate a file transfer from a chat customer. Available in API version 31.0 and later.
OptionsHasAgentSneakPeek	**Type** boolean **Properties** Create, Filter **Description** Determines whether Sneak Peek is enabled for agents. Available in API version 29.0 and later.
OptionsHasAssistanceFlag	**Type** boolean **Properties** Create, Filter **Description** Determines whether assistance flags are enabled for agents. Available in API version 29.0 and later.
OptionsHasChatConferencing	**Type** boolean **Properties** Create, Filter **Description** Determines whether agents can invite other agents into a customer chat. Available in API version 34.0 and later.
OptionsHasChatMonitoring	**Type** boolean **Properties** Create, Filter **Description** Determines whether supervisors can view agents' ongoing chats. Available in API version 29.0 and later.
OptionsHasChatTransferToAgent	**Type** boolean

Field Name	Details
	Properties Create, Filter **Description** Specifies whether an agent can transfer a chat directly to another agent. Available in API version 36.0 and later.
OptionsHasChatTransferToButton	**Type** boolean **Properties** Create, Filter **Description** Specifies whether an agent can transfer a chat to an agent assigned to a particular chat button. Available in API version 36.0 and later.
OptionsHasChatTransferToSkill	**Type** boolean **Properties** Create, Filter **Description** Specifies whether an agent can transfer a chat to agents assigned to a particular skill. Available in API version 36.0 and later.
OptionsHasVisitorBlocking	**Type** boolean **Properties** Create, Filter **Description** Determines whether an agent has the ability to block troublesome visitors by IP address. Available in API version 34.0 and later.
OptionsHasWhisperMessage	**Type** boolean **Properties** Create, Filter **Description** Determines whether supervisors can send private messages to agents within an agent's chat with a customer. Available in API version 29.0 and later.
OptionsIsAutoAwayOnPushTimeout	**Type** boolean **Properties** Create, Filter

Field Name	Details
	Description Determines whether an agent's status automatically changes to Away if the agent doesn't respond to a chat request within the specified push time-out limit. Available in API version 34.0 and later.
`SupervisorDefaultAgentStatus`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The default agent status by which to filter agents in the Agent Status list in the supervisor panel.
`SupervisorDefaultButtonId`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The default button ID by which to filter agents in the Agent Status list in the supervisor panel.
`SupervisorDefaultSkillId`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The default skill ID by which to filter agents in the Agent Status list in the supervisor panel.

Usage

Use this object to query and manage agent configurations in Chat.

LiveChatUserConfigProfile

Represents a join between LiveChatUserConfig and Profile. This object is available in API version 24.0 and later.

Supported Calls

`create()`, `delete()`, `query()`, `retrieve()`

Special Access Rules

As of Summer '20 and later, only authenticated internal and external users can access this object.

Fields

Field Name	Details
`LiveChatUserConfigId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The record ID of the agent configuration
`ProfileId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The record ID of the profile

Usage

Use this object to assign specific agent configurations to specific user profiles.

LiveChatUserConfigUser

Represents a join between Live Chat User Config and User. This object is available in API version 24.0 and later.

Supported Calls

`create()`, `delete()`, `query()`, `retrieve()`

Special Access Rules

As of Summer '20 and later, only authenticated internal and external users can access this object.

Fields

Field Name	Details
`LiveChatUserConfigId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The record ID of the agent configuration
`UserId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The record ID of the user

Usage

Use this object to assign specific agent configurations to specific users.

LiveChatVisitor

Represents a website visitor who has started or tried to start a chat session. This object is available in API version 24.0 and later.

Supported Calls

`create()`, `delete()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`LastReferencedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.

Field Name	Details
LastViewedDate	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (LastReferencedDate) but not viewed it.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** The name of the visitor
SessionKey	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The session key used to uniquely identify the visitor

Usage

Use this object to query and manage live chat visitors.

Location

Represents a warehouse, service vehicle, work site, or other element of the region where your team performs field service work. In API version 49.0 and later, you can associate activities with specific locations. Activities, such as the tasks and events related to a location, appear in the activities timeline when you view the location detail page. Also in API version 49.0 and later, Work.com users can view Employees as a related list on Location records.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
CloseDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Date the location closed or went out of service.
ConstructionEndDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Date construction ended at the location.
ConstructionStartDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Date construction began at the location.
Description	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of the location.
DrivingDirections	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Directions to the location.
ExternalReference	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description Identifier of a location.
`IsInventoryLocation`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the location stores parts. Note: This field must be selected if you want to associate the location with product items.
`IsMobile`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the location moves. For example, a truck or tool box.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the location was last modified. Its label in the user interface is `Last Modified Date`.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date the location was last viewed.
`Latitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The latitude of the location.

Field Name	Details
Location	**Type** location **Properties** Nillable **Description** The geographic location.
LocationLevel	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The location’s position in a location hierarchy. If the location has no parent or child locations, its level is 1. Locations that belong to a hierarchy have a level of 1 for the root location, 2 for the child locations of the root location, 3 for their children, and so forth.
LocationType	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Picklist of location types. It has no default values, so you must populate it before creating any location records.
LogoId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A ContentAsset representing a logo for the location. This field is available in API version 50.0 and later.
Longitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The longitude of the location.
Name	**Type** string

Field Name	Details
	Properties Create, Filter, Group, idLookup, Sort, Update **Description** The name of the location. For example, Service Van #4.
`OpenDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Date the location opened or came into service.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The location's owner or driver.
`ParentLocationId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The location's parent location. For example, if vans are stored at a warehouse when not in service, the warehouse is the parent location.
`PossessionDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date the location was purchased.
`RemodelEndDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Date when remodel construction ended at the location.

Field Name	Details
RemodelStartDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Date when remodel construction started at the location.
RootLocationId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** (Read Only) The top-level location in the location’s hierarchy.
ShouldSyncWithOci	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the location should sync its data with Omnichannel Inventory. The default value is `false`. This field is available in API version 51.0 and later.
TimeZone	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Picklist of available time zones.
VisitorAddressId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Lookup to an account’s or client’s address.

Usage

Before creating any location records, add at least one value to the Location Type picklist. LocationType is a required field.

To track your inventory in Salesforce, create product items, which represent the stock of a particular product a particular location. For example, create a product item that represents the 500 bolts you have in stock at your Warehouse A location. Each product item must be associated with a location.

To get a more granular picture of your field service operation, associate locations with service territories. For example, if a warehouse is located in a particular service territory, add it as a service territory location.

Important: "Location" in Salesforce can also refer to the geolocation compound field found on many standard objects. When referencing the Location object in your Apex code, always use `Schema.Location` instead of `Location` to prevent confusion with the standard Location compound field. If referencing both the Location object and the Location field in the same snippet, you can differentiate between the two by using `System.Location` for the field and `Schema.Location` for the object.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

LocationFeed
Feed tracking is available for the object.

LocationHistory
History is available for tracked fields of the object.

LocationOwnerSharingRule
Sharing rules are available for the object.

LocationShare
Sharing is available for the object.

SEE ALSO:

LocationGroup

LocationGroupAssignment

LocationGroup

Represents a group of Omnichannel Inventory locations, providing an aggregate view of inventory availability across those locations. Omnichannel Inventory can create an inventory reservation for an order at the location group level, then assign the reservation to one or more locations in the group as needed. This object is available in API version 51.0 and later.

You can define location groups according to the logic of your business needs. For example, a location group can represent the warehouses in a geographic region, or it can include the fulfillment centers associated with a particular online storefront.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is only available in Omnichannel Inventory orgs.

Fields

Field	Details
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of the location group.
ExternalReference	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Used when OCI is integrated with B2C Commerce to associate the location group with an inventory list in B2C Commerce. This value must match the inventory list ID in B2C Commerce.
IsEnabled	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the location group is in use. If set to *false*, then inventory functions ignore this location group and its data isn't synchronized with OCI. The default value is *true*.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. A null value can mean that this record has only been referenced (LastReferencedDate) and not viewed.
LocationGroupName	**Type** string

Field	Details
	Properties Create, Filter, Group, idLookup, Sort, Update **Description** The name of the location group.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the user who currently owns this location group. Default value is the API user that created the record.
`ShouldSyncWithOci`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Specifies whether to synchronize inventory data for this location group with Omnichannel Inventory. The default value is *`true`*.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

LocationGroupFeed
Feed tracking is available for the object.

LocationGroupHistory
History is available for tracked fields of the object.

LocationGroupOwnerSharingRule
Sharing rules are available for the object.

LocationGroupShare
Sharing is available for the object.

SEE ALSO:

Location

LocationGroupAssignment

LocationGroupAssignment

Represents the assignment of a location to a location group. This object is available in API version 51.0 and later.

You can assign a location to multiple location groups, which associates it with one location group assignment for each location group that it's assigned to. Each location group assignment represents the relationship between one location and one location group, so a location or location group can be associated with multiple location group assignments.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is only available in Omnichannel Inventory orgs.

Fields

Field	Details
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. A null value can mean that this record has only been referenced (LastReferencedDate) and not viewed.
`LocationExternalReference`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The external reference of the associated location.
`LocationGroupAssignment`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort

Field	Details
	Description The name of the location group assignment.
LocationGroupExternalReference	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The external reference of the associated location group.
LocationGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** (Master-Detail) The associated location group.
LocationGroupName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The location group name of the associated location group.
LocationId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** (Master-Detail) The associated location.
LocationName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the associated location.

SEE ALSO:

Location

LocationGroup

LocationTrustMeasure

Represents the COVID safety protocols that your business follows. For example, enforcement of masks, social distancing, cleanliness, and capacity limits. This object is available in API version 50.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`Description`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** A brief description of the safety protocol. For example, "Employees and customers are required to wear a mask in the store."
`IconUrl`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A public image URL to display for the LocationTrustMeasure object.
`IsVisibleInPublic`	**Type** boolean **Properties** Create, defaulted on create, Filter, Group, Sort, Update **Description** If true, displays the LocationTrustMeasure object on your site. If false, hides the LocationTrustMeasure object on your site.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.

Field	Details
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date on which the record was last viewed.
LocationExternalReference	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** An ID assigned to the LocationTrustMeasure objects for a particular location.
LocationId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The unique ID for the location associated with the LocationTrustMeasure.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** An auto-assigned name for the LocationTrustMeasure.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the owner for this record.
SortOrder	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The order in which to display LocationTrustMeasure objects on your site.

Field	Details
`Title`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the safety protocol. For example, Enforcement of Masks.

LocWaitlistMsgTemplate

Represents a junction object connecting LocationWaitlist to MessagingTemplate. This object is available in API version 50.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date on which the record was last viewed.
`LocationWaitlistId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update

Field	Details
	Description Reference to the LocationWaitlist record.
MessagingTemplateId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Reference to the MessagingTemplate record.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of this record.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the owner for this record.
Type	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The status of the queue. Possible values are: • approaching—In Progress • confirmation—Confirmed • inactive—Inactive • ready—Ready • removed—Removed

LocationWaitlist

Represents a queue created for a specific location. Multiple queues can be created for a single location. For example, you can have a queue for each sales agent or a standard queue and a queue for vulnerable groups. The specific party of people in a queue is represented by LocationWaitlistedParty. This object is available in API version 50.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`BusinessHoursId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A reference to the BusinessHours record that contains the hours the business is open.
`ClosedDateTime`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The time a queue is closed.
`CumulativeGuestCount`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The total number of guests allowed.
`CumulativeGuestGroupCount`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The total number of groups allowed.

Field	Details
CurrentGuestCount	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The current number of guests.
Description	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of this record.
GuestCapacity	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The total capacity of guests.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date on which the record was last viewed.
MaxPartySize	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description The maximum size of a group.
MessagingChannelId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The messaging channel ID.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the group.
OpenDateTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The time a queue is open.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the owner for this record.
PartyReminderDelayMinutes	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The number of minutes between when a party is notified and when they receive a reminder.
PlaceId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description The location ID for this record.
`ResourceCapacity`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The capacity for this resource.
`ResourceOccupancyCount`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The occupancy count for this resource.
`Status`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The status of the queue. Possible values are: • `closed` • `open` • `paused`

LocationWaitlistedParty

Represents a specific party of people waiting in a queue. This object is available in API version 50.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
Description	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of this queue.
EntryDateTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date and time a party is added to the queue.
EstimatedWaitHours	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The estimated hours of wait time for a party.
EstimatedWaitMinutes	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The estimated minutes of wait time for a party.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort

Field	Details
	Description The date on which the record was last viewed.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the group.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the owner for this record.
PartySize	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The size of the queued party.
PartyStatus	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The state of a party in the queue. Possible values are: • canceled • entered • exited • ready • waiting
SignUpDateTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update

Field	Details
	Description The date and time when a party signed up for the queue.
WaitlistId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID for the queue.

LoginEvent

The documentation has moved to LoginEvent in the *Platform Events Developer Guide*.

LoginGeo

Represents the geographic location of the user's IP address for a login event. Due to the nature of geolocation technology, the accuracy of geolocation fields (for example, country, city, postal code) may vary. This object is available in API version 34.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Only users with Manage Users permissions can access this object.

Fields

Field	Details
City	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The city where the user's IP address is physically located. This value is not localized.
Country	**Type** string

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** The country where the user's IP address is physically located. This value is not localized.
CountryIso	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ISO 3166 code for the country where the user's IP address is physically located. For more information, see Country Codes - ISO 3166
Latitude	**Type** double **Properties** Filter, Nillable, Sort **Description** The latitude where the user's IP address is physically located.
LoginTime	**Type** dateTime **Properties** Filter, Sort **Description** Time of the login attempt, in GMT time zone.
Longitude	**Type** double **Properties** Filter, Nillable, Sort **Description** The longitude where the user's IP address is physically located.
PostalCode	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The postal code where the user's IP address is physically located. This value is not localized.

Field	Details
Subdivision	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the subdivision where the user's IP address is physically located. In the U.S., this value is usually the state name (for example, Pennsylvania). This value is not localized.

Usage

The API allows you to do many powerful queries. A few examples are:

Sample Query	Query String
Query showing the country for a login event, where `Id=LoginGeoId` from AuthSession	`SELECT Country FROM LoginGeo WHERE Id = '0LE###############'`
Query showing the city and postal code for a login event, where `Id=LoginGeoId` from LoginHistory	`SELECT City, PostalCode FROM LoginGeo WHERE Id = '0SO###############'`

LoginHistory

Represents the login history for all successful and failed login attempts for organizations and enabled portals. This object is available in API version 21.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Special Access Rules

With one exception, only users with Manage Users permissions can access this object. The exception is that, in API version 37.0 and later, all users can retrieve their own login history records.

Fields

Field	Details
ApiType	**Type** string

Field	Details
	Properties Group, Nillable, Sort **Description** Indicates the API type, for example `Soap Enterprise`. Label is **API Type**.
`ApiVersion`	**Type** string **Properties** Group, Nillable, Sort **Description** Displays the API version used by the client. Label is **API Version**.
`Application`	**Type** string **Properties** Group, Nillable, Sort **Description** The application used to access the organization. Label is **Application**.
`AuthMethodReference`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The authentication method used by a third-party identification provider for an OpenID Connect single sign-on protocol. This field is available in API version 51.0 and later. Label is **Authentication Method Reference**.
`AuthenticationServiceId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The 18-character ID for an authentication service for a login event. For example, you can use this field to identify the SAML or authentication provider configuration with which the user logged in. This field is available in API version 34.0 and later. Label is **Authentication Service Id**.
`Browser`	**Type** string **Properties** Group, Nillable, Sort

Field	Details
	Description The current browser version. Label is **Browser**.
`CipherSuite`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The TLS cipher suite used for the login. Values are OpenSSL-style cipher suite names, with hyphen delimiters. For more information, see OpenSSL Cryptography and SSL/TLS Toolkit. This field is available in API version 37.0 and later.
`ClientVersion`	**Type** string **Properties** Group, Nillable, Sort **Description** Version of the API client. Label is **Client Version**.
`CountryIso`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ISO 3166 code for the country where the user's IP address is physically located. For more information, see Country Codes - ISO 3166. This field is available in API version 37.0 and later.
`LoginGeoId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The 18-character ID for the record of the geographic location of the user for a successful or unsuccessful login event. The accuracy of geolocation fields like country, city, or postal code can vary because of the nature of the technology. This field is available in API version 34.0 and later.
`LoginTime`	**Type** dateTime **Properties** Filter, Sort

Field	Details
	Description Time zone is based on GMT. Label is **Login Time**.
`LoginType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of login used to access the session. • `AppExchange—AppExchange` • `Application—Application` • `Certificate—Certificate-based login` • `ChatterCommunityPortalUnPwd—Chatter Communities External User` • `ChatterCommunityThirdPartySso—Chatter Communities External User Third Party SSO` • `EmployeeLoginToCommunity—Employee Login to Community` • `LightningLogin—Lightning Login` • `NetworksPortalApiOnly—Networks Portal API Only` • `Oauth, Remote Access Client—Remote Access Client` • `Oauth2, Remote Access 2.0—Remote Access 2.0` • `OtherApi—Other Apex API` • `Partner—Partner Product` • `PasswordlessLogin—Passwordless Login` • `Portal—Customer Service Portal` • `PrmPortalThirdPartySso—Partner Portal Third-Party SSO` • `PrmPortal—Partner Portal` • `Saml—SAML Idp Initiated SSO` • `SamlChatterNetworks—SAML Chatter Communities External User SSO` • `SamlCspPortal—SAML Customer Service Portal SSO` • `SamlPrmPortal—SAML Partner Portal SSO` • `SamlSite—SAML Site SSO` • `Saml2—SAML Sfdc Initiated SSO` • `SelfService—SelfService` • `ThirdPartySso—Third Party SSO` Label is **Login Type**.

Field	Details
LoginUrl	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL from which the login request is coming. Label is **Login URL**.
NetworkId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the Experience Cloud site that the user is logging in to. This field is available in API version 31.0 and later, if Salesforce Experience Cloud sites are enabled for your org.
OptionsIsGet	**Type** boolean **Properties** Filter **Description** The HTTP method used for the session login is a GET request.
OptionsIsPost	**Type** boolean **Properties** Filter **Description** The HTTP method used for the session login is a POST request.
Platform	**Type** string **Properties** Group, Nillable, Sort **Description** Operating system on the login machine. Label is **Platform**.
SourceIp	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description IP address of the machine from which the login request is coming. The address can be an IPv4 or IPv6 address in API version 23.0 or later. In API version 22.0 or earlier, the address is an IPv4 address, and IPv6 addresses are null. Label is **Source IP**.
`Status`	**Type** string **Properties** Group, Nillable, Sort **Description** Displays the status of the attempted login. Status is either success or a reason for failure. Label is **Status**.
`TlsProtocol`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The TLS protocol used for the login. Possible values are: • `TLS 1.0` • `TLS 1.1` • `TLS 1.2` • `TLS 1.3` • `Unknown` This field is available in API version 37.0 and later.
`UserId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the user logging in. Label is **User ID**.

Usage

Not all fields are filterable. You can only filter on the following fields:

- `AuthenticationServiceId`
- `CipherSuite`
- `CountryIso`
- `Id`

- `LoginTime`
- `LoginType`
- `LoginUrl`
- `NetworkId`
- `OptionsIsGet`
- `OptionsIsPost`
- `TlsProtocol`
- `UserId`

The API allows you to do many powerful queries. A few examples are:

Sample Query	Query String
Simple query showing UserId & LoginTime for each user	`SELECT UserId, LoginTime from LoginHistory;`
Query showing logins only after a specified date and time	`SELECT UserId, LoginTime from LoginHistory WHERE LoginTime > 2010-09-20T22:16:30.000Z;`
Query showing logins for a specific time interval	`SELECT UserId, LoginTime from LoginHistory WHERE LoginTime > 2010-09-20T22:16:30.000Z AND LoginTime < 2010-09-21T22:16:30.000Z;`
Query showing the authentication service for a SAML login event, where `Id=AuthenticationServiceId` from LoginHistory	`SELECT name, issuer, samlVersion FROM SamlSsoConfig WHERE Id = '0LE###############'`
Query showing the authentication service for an authentication provider login event, where `Id=AuthenticationServiceId` from LoginHistory	`SELECT Type, DeveloperName FROM AuthProvider WHERE Id = '0SO###############'`

LoginIp

Represents a validated IP address. This object is available in version 28.0 and later.

Supported Calls

`describeSObjects()`, `delete()`, `query()`, `retrieve()`

Fields

Field	Details
`ChallengeMethod`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort

Field	Details
	Description The challenge method used to confirm the user's identity. Possible values include the following. • `Email` • `SMS` • `TOTP_CHOICE`: The user chooses multi-factor authentication. • `TOTP_ONLY`: The user is required to use multi-factor authentication.
`ChallengeSentDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the user was authenticated.
`IsAuthenticated`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, the user has already been authenticated.
`SourceIp`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The IP address the user logged in from.
`UsersId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the user associated with this item.

Usage

At every login, the IP address of the login request is checked against the validated IP addresses using LoginIp. A match means the login IP address is a known IP address. If there's no match, the address is unknown, and the user is asked to confirm their identity.

LogoutEventStream

The documentation has moved to LogoutEventStream in the *Platform Events Developer Guide*.

LookedUpFromActivity

This read-only object is displayed as a related list on an activity record (an event or a task); the list contains records that have custom lookup relationships from the activity to another object. This object is not queryable.

Supported Calls

`describeSObjects()`

Fields

Field Name	Details
`AccountId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the related account, which is determined as follows: • The account associated with the `WhatId`, if it exists; or • The account associated with the `WhoId`, if it exists; otherwise • `null` For information on IDs, see Field Types
`ActivityDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Indicates one of the following: • The due date of a task • The date of an event if `IsAllDayEvent` is set to `true` This field has a time stamp that is always set to midnight in the Universal Time Coordinated (UTC) time zone. The time stamp doesn't represent the time of the activity; don't attempt to alter it to accommodate time zone differences. Label is `Date`.

Field Name	Details
ActivityDateTime	**Type** dateTime **Properties** Aggregate, Filter, Nillable, Sort **Description** Contains the event's due date if the `IsAllDayEvent` flag is set to `false`. The time portion of this field is always transferred in the Coordinated Universal Time (UTC) time zone. Translate the time portion to or from a local time zone for the user or the application, as appropriate. Label is **Due Date Time**. The value for this field and `StartDateTime` must match, or one of them must be `null`.
ActivitySubtype	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Provides standard subtypes to facilitate creating and searching for specific activity subtypes. This field isn't updateable. `ActivitySubtype` values: • Task • Email • Call • Event • List Email
ActivityType	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** Represents one of the following values: `Call`, `Email`, `Meeting`, or `Other`. Label is `Type`. These are default values, and can be changed. `ActivityType` is the union of `TaskType` and `EventType`. If the same activity appears in both dynamic picklists, duplicate activities appear. `TaskType` and `EventType` can each have a `Call` type. Internally, they are distinct from each other.
CallDisposition	**Type** string

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** Represents the result of a given call; for example, “we’ll call back,” or “call unsuccessful.” Limit is 255 characters.
CallDurationInSeconds	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Duration of the call in seconds.
CallObject	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of a call center. Limit is 255 characters.
CallType	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of call being answered: Inbound, Internal, or Outbound.
Description	**Type** textarea **Properties** Nillable **Description** Contains a description of the event or task. Limit is 32 KB.
DurationInMinutes	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Indicates the duration of the event or task.

Field Name	Details
EndDateTime	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates the end date and time of the event or task. Available in versions 27.0 and later. This field is optional, depending on the following: • If IsAllDayEvent is true, you can supply a value for either DurationInMinutes or EndDateTime. Supplying values in both fields is allowed if the values add up to the same amount of time. If both fields are null, the duration defaults to one day. • If IsAllDayEvent is false, a value must be supplied for either DurationInMinutes or EndDateTime. Supplying values in both fields is allowed if the values add up to the same amount of time.
IsAllDayEvent	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If the value of this field is set to true, then the activity is an event spanning a full day, and the ActivityDate defines the date of the event. If the value of this field is set to false, then the activity may be an event spanning less than a full day, or it may be a task. Label is All-Day Event.
IsClosed	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a task is closed; value is always false. This field is set indirectly by setting Status on the task—each picklist value has a corresponding IsClosed value. Label is Closed.
IsHighPriority	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates a high-priority task. This field is derived from the Priority field.

Field Name	Details
IsReminderSet	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a reminder is set for an activity (`true`) or not (`false`).
IsTask	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If the value of this field is set to `true`, then the activity is a task; if the value is set to `false`, then the activity is an event. Label is `Task`.
IsVisibleInSelfService	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If the value of this field is set to `true`, then the activity can be viewed in the self-service portal. Label is `Visible in Self-Service`.
Location	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** If the activity is an event, then this field represents the location of the event. If the activity is a task, then the value is `null`.
OwnerId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the user or group who owns the activity.
Priority	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Sort

Field Name	Details
	Description Indicates the priority of a task, such as high, normal, or low.
ReminderDateTime	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Represents the time at which a reminder is scheduled to fire if IsReminderSet is set to true. If IsReminderSet is set to false, then either the user has deselected the reminder checkbox in the user interface or the reminder has already fired at the time indicated by the value.
StartDateTime	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates the start date and time of the event. Available in versions 13.0 and later. The StartDateTime field contains the event start date. However, if the event's IsAllDayEvent flag is set to true (indicating an all-day event), then the time stamp in the StartDateTime field is always set to midnight in the Coordinated Universal Time (UTC) time zone. Don't attempt to alter the time stamp to account for any time zone differences. If the event's IsAllDayEvent flag is set to false, then you must translate the time portion of the time stamp in the StartDateTime field to or from a local time zone for the user or the application, as appropriate, and the translation must be in the Coordinated Universal Time (UTC) time zone. If this field has a value, then ActivityDate and ActivityDateTime either must be null or must match the value of this field.
Status	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** Indicates the current status of a task, such as in progress or complete. Each predefined status field sets a value for IsClosed.
Subject	**Type** combobox

Field Name	Details
	Properties Filter, Nillable, Sort **Description** Contains the subject of the task or event.
`WhatId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The `WhatId` represents nonhuman objects such as accounts, opportunities, campaigns, cases, or custom objects. `WhatId`s are polymorphic. Polymorphic means a `WhatId` is equivalent to the ID of a related object. The label is `Related To ID`.
`WhoId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The WhoId represents a human such as a lead or a contact. WhoIds are polymorphic. Polymorphic means a WhoId is equivalent to a contact's ID or a lead's ID. The label is `Name ID`.

Usage

Query activities related to an object

1. Optionally, issue a describe call against the object whose activities you wish to query, to get a suggestion of the correct SOQL to use.
2. Issue a SOQL relationship query with a main clause that references the object, and an inner clause that references the activity custom lookup relationship; for example:

```
SELECT id, name,
(SELECT id, subject from sponsoredact__r)
FROM Contact
```

   In this example *sponsoredact__r* is a user defined relationship list.

The user interface enforces sharing rules, filtering out related-list items that a user doesn't have permission to see.

The following restrictions on users who don't have "View All Data" permission help prevent performance issues:

- In the main clause of the relationship query, you can reference only one record. For example, you can't filter on all records where the account name starts with 'A'; instead, you must reference a single account record.
- In the inner clause of the query, you can't use `WHERE`.

- In the inner clause of the query, you must specify a limit of 500 or fewer on the number of rows that are returned in the list.
- You must sort on `ActivityDate` in descending order and `LastModifiedDate` in descending order; you can display nulls last. For example: `ORDER BY ActivityDate DESC NULLS LAST, LastModifiedDate DESC`.

Macro

Represents a macro, which is a set of instructions that tells the system to perform one or more tasks. This object is available in API version 32.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of what this macro does.
`FolderId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Returns the ID of the folder that contains the macro. Available in API version 44.0 and later.
`FolderName`	**Type** string **Properties** Filter, Nillable, Sort **Description** Name of the folder that contains the macro. Available in API version 44.0 and later.
`IsAlohaSupported`	**Type** boolean **Properties** Defaulted on create, Filter

Field	Details
	Description Specifies whether the macro is supported in Salesforce Classic.
`IsLightningSupported`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Specifies whether the macro is supported in Lightning Experience.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the macro record was last referenced.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the macro record was last viewed.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Name of the macro.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner of the session record.
`StartingContext`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort

Field	Details
	Description The object the macro performs actions on. In Salesforce Classic, macros are supported on objects with both feed-based layouts and quick actions. In Lightning Experience, macros are supported on standard and custom objects that allow quick actions and have a customizable page layout.

Usage

A macro definition consists of a Macro object and several associated MacroInstruction objects.

First, create a Macro object. Then, create MacroInstructions that specify objects, operations, conditions, and targets for the macro.

A macro contains an ordered list of macro instructions whose index field, sortOrder, is 0-based. If there's an incorrect sequence of macro instructions, the macro doesn't execute.

If you update a macro definition or add or remove instructions from a macro, make sure that the sortOrder field that defines the execution order is correct. To delete an entire macro definition, invoke the delete operation on the Macro object.

The table describes the supported macro instruction targets and how they relate to each other.

Note: Strings indicated by <brackets> are variables. The variable description describes the required type. For example, Tab.<EntityApiName> requires the entity name. If your custom entity name is MyCustomObject, your target API is Tab.MyCustomObject__c.

If a macro instruction listed in the table supports an implicit operation, you can use that operation as a direct child instruction without explicitly specifying a target. The hyphens used in the table illustrate the hierarchical relationship between targets. A target isn't available if its parent isn't.

Table 1: Macro Instruction Target Grammar and Hierarchy

Target API Name	Supported Operations
Tab.<EntityApiName>	SELECT, CLOSE (implicit)
- QuickAction.<EntityApiName>.<QuickActionName>	SELECT, SUBMIT (implicit)
- - Field.<QATargetEntityApiName>.<FieldApiName>	SET
- - Field.<QATargetEntityApiName>.<MultilineTextFieldApiName>.cursor	INSERT
- - Field.<QATargetEntityApiName>.<SinglelineTextFieldApiName>.end	INSERT
- QuickAction.Case.Email	SELECT, SUBMIT (implicit)
- - Field.EmailMessage.<FieldApiName>	SET
- - Field.EmailMessage.<MultilineTextFieldApiName>.cursor	INSERT
- - Field.EmailMessage.<SinglelineTextFieldApiName>.end	INSERT
- - Field.EmailTemplate	SET
- SidebarCmp.Knowledge	SELECT

Target API Name	Supported Operations
`- - SearchAction.KnowledgeArticle`	SELECT
`- - - Field.SearchString`	SET, INSERT
`- - - Command.Search`	SUBMIT
`- - SearchResult.KnowledgeArticle.MostRecentItem`	SELECT
`- - - Command.AttachToRecord`	SUBMIT
`- - - Command.InsertToEmail`	SUBMIT
`- - - Command.AttachToEmailAsPDF`	SUBMIT

Example: This example describes a macro that opens a quick action, sets some fields in the quick action, and submits the quick action.

```
0. SELECT Tab.Case
1.   SELECT QuickAction.Case.Email
2.     SET Field.EmailMessage.Subject
3.     SET Field.EmailMessage.ToAddress
4.     INSERT Field.EmailMessage.HtmlBody.cursor
5.     SUBMIT
```

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

MacroHistory
History is available for tracked fields of the object.

MacroOwnerSharingRule
Sharing rules are available for the object.

MacroShare
Sharing is available for the object.

MacroInstruction

Represents an instruction in a macro. An instruction can specify the object that the macro interacts with, the context or publisher that the macro works within, the operation or action that the macro performs, and the target of the macro's actions.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
MacroId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the macro that contains this instruction.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** Name of the instruction.
Operation	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The action that the macro instruction performs. Valid values are: • Select • Set • Insert • Submit • Close To create macro instructions that execute conditionally, these values are available in API version 46.0 and later. • IF • ELSEIF • ELSE • ENDIF
SortOrder	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** Order of this instruction in the macro.

Field Name	Details
`Target`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The object that's the target of the operation. For example, the target for the active case tab (Tab.Case) or a quick action, like the Send Email action on the case object (QuickAction.Case.SendEmail). In Lightning Experience, macros are supported on standard and custom objects that allow quick actions and have a customizable page layout. In Salesforce Classic, macros are supported on objects with feed-based layouts and quick actions. You can specify relative dates and times for the following targets. • DateTime • Date • Time • DueDate • Birthday
`Value`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Value of a field. If the operation is Select, then the value is null, because the operation selects the object on which the macro performs an action. An instruction can contain both a `Value` field and a `ValueRecord` field, but only one of these fields can have a value. The other field value must be null. To create relative dates and times, specify a valid Salesforce formula, prefaced by `MacroFormula`. For example, the following formula creates a date that is 1 day from now: `MacroFormula:NOW() + 1` You can't edit custom relative formulas in the Macro Builder.
`ValueRecord`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the value or record. The `ValueRecord` can be either a value or a record, but not both. An instruction can contain both a `Value` field and a

Field Name	Details
	`ValueRecord` field, but only one of these fields can have a value. The other field value must be null.

Usage

MacroInstructions can specify objects, operations, conditions, and targets. For example, a macro containing these instructions performs a quick action that sends an email.

```
      Select Email QuickAction
      Set Subject…
      Set To…
      Set Body…
      Submit
```

You can create conditional macros using `IF`, `ELSEIF`, `ELSE`, and `ENDIF` as operations. In a conditional statement, the ExpressionFilter and ExpressionFilterCriteria objects are used to control which instructions execute. The ExpressionFilter object lets you define a logical expression with one or more conditions. It uses a child object, ExpressionFilterCriteria, to represent each condition that is evaluated.

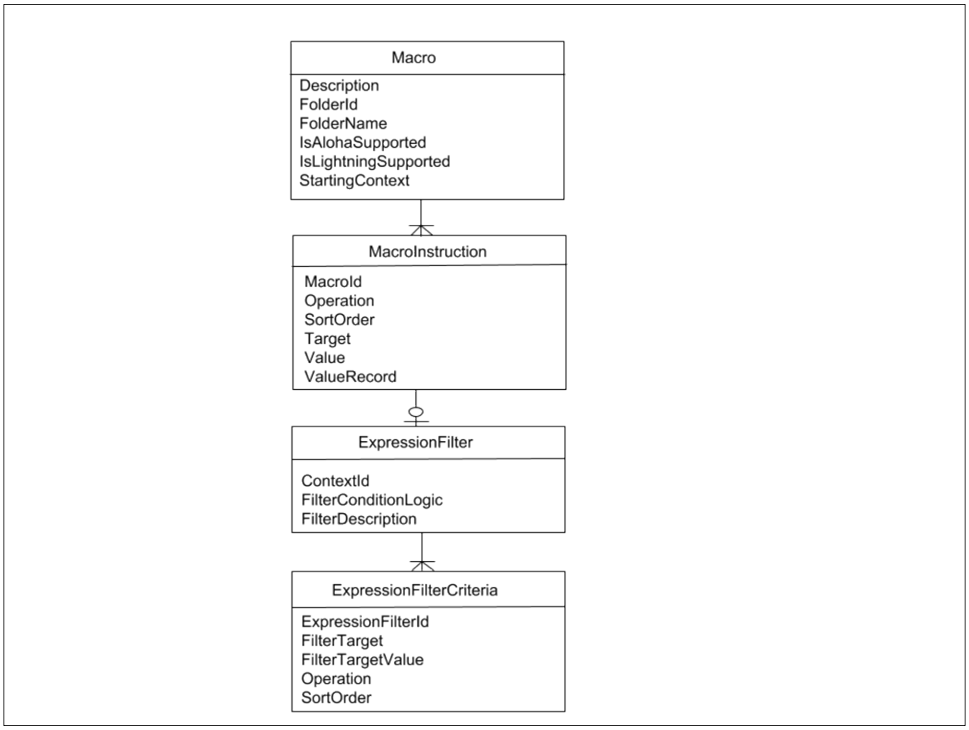
For example, consider the following conditional statement and macro instructions.

```
IF (Case.Status EQUALS New) AND (Case.Origin EQUALS Phone)
      Select Email QuickAction
      Set Subject…
      Set To…
      Set Body…
      Submit
ELSE
      Select Update Case Detail
      Update Case Description…
      Submit
ENDIF
```

The ExpressionFilter object includes a `FilterConditionLogic` field containing `1 AND 2`, where 1 and 2 are ExpressionFilterCriteria objects. The SortOrder field in the ExpressionFilterCriteria object maps condition 1 to `Case.Status EQUALS New`, and condition 2 to `Case.Origin EQUALS Phone`. If the conditional statement evaluates to true, then the instructions in the `IF` block are executed; otherwise, the instructions in the `ELSE` block are executed.

Any number of macro instructions can be present inside an `IF`, `ELSEIF`, or `ELSE` block. In addition, conditions can be nested.

Data Model



MacroUsage

Represents macro usage on a record, including which macro was used, who used it, and how they used it. This object is available in API version 47.0 and later.

Supported Calls

describeSObjects(), getDeleted(), getUpdated(), query(), retrieve()

Special Access Rules

This object is always read-only.

Fields

Field	Details
`AppContext`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Context in which the macro was run. Possible values are:

Field	Details
	• `Aloha`—Salesforce Classic • `Lightning`—Lightning Experience • `Unknown`
`ConditionCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Number of conditional instructions contained in the macro at execution.
`ContextRecord`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** ID of the record on which the macro was run.
`DurationInMs`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The execution time, in milliseconds, for the macro.
`ExecutedInstructionCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of macro instructions that ran successfully. If the macro completed successfully, this value is the same as `InstructionCount`.
`ExecutionEndTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time at which macro execution completed.
`ExecutionState`	**Type** picklist

Field	Details
	Properties Filter, Group, Nillable, Restricted picklist, Sort **Description** The end state of macro execution. Possible values are • `SUCCESS` • `FAILURE` • `CANCELED`
`FailureReason`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** If `ExecutionState` is failure, this field stores the reason for the failure. Possible values are: • `ACCESS` • `GENERIC` • `TIMEOUT` • `UNSUPPORTED`
`FolderId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the folder containing the macro at the time it was used.
`InstructionCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of instructions in the macro at the start of execution.
`IsFromBulk`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If true, the macro was run as a bulk macro. When a bulk macro is run on multiple records, usage is recorded per record.

Field	Details
MacroID	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the macro.
Name	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** Name of the macro.
OwnerId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the group or user that owns the macro.
UserId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the user that ran the macro.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

MacroUsageOwnerSharingRule
Sharing rules are available for the object.

MacroUsageShare
Sharing is available for the object.

MailmergeTemplate

Represents a mail merge template (a Microsoft Word document) used for performing mail merges for your organization.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

- All users can view this object, but you need the "Customize Application" permission to modify it.
- Customer Portal users can't access this object.

Fields

Field	Details
`Body`	**Type** base64 **Properties** Create **Description** Required. Microsoft Word document to use as a mail merge template. Due to limitations with Microsoft Word mail merge templates, your client application can specify the Body field when creating these records, but not when updating them. Limit: 5 MB.
`BodyLength`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Length of the Microsoft Word document.
`Description`	**Type** string **Properties** Create, Filter,Group, Nillable, Sort, Update **Description** Required. Text description of this mail merge template. Limit: 255 characters.
`Filename`	**Type** string **Properties** Create, Filter, Group, Sort

Field	Details
	Description Required. File name of the Microsoft Word document that was uploaded as a mail merge template. Limit: 255 characters in length.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`LastUsedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date and time when this MailmergeTemplate was last used.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. Name of this mail merge template.
`SecurityOptionsAttachmentHasFlash`	**Type** boolean **Properties** Create, Filter, Update **Description** Required. True if Flash Injection was detected in the attachment.
`SecurityOptionsAttachmentHasXSSThreat`	**Type** boolean **Properties** Create, Filter, Update **Description** Required. True if a cross site scripting threat was detected in the attachment.
`SecurityOptionsAttachmentScannedforFlash`	**Type** boolean

Field	Details
	Properties Create, Filter, Update **Description** Required. True if the attachment has been scanned for Flash Injection.
`SecurityOptionsAttachmentScannedForXSS`	**Type** boolean **Properties** Create, Filter, Update **Description** Required. True if the attachment has been scanned for a cross site scripting threat.

Usage

Use this object to manage mail merge templates for your organization.

SEE ALSO:

Object Basics

MaintenanceAsset

Represents an asset covered by a maintenance plan in field service. Assets can be associated with multiple maintenance plans.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
`AssetId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update

Field Name	Details
	Description The asset associated with the maintenance asset.
`ContractLineItemId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Contract line item associated with the maintenance asset. This field can only list a contract line item that is associated with the asset, and whose parent service contract is associated with the parent maintenance plan.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the maintenance asset was last modified. Its label in the user interface is Last Modified Date.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the product request was last viewed.
`MaintenanceAssetNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** An auto-assigned number that identifies the maintenance asset.
`MaintenancePlanId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Maintenance plan associated with the maintenance asset.

Field Name	Details
NextSuggestedMaintenanceDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The suggested date of service for the maintenance asset's first work order (not the date the work order is created). This corresponds to the work order's `SuggestedMaintenanceDate`. If left blank when the maintenance asset is created, this field inherits its initial value from the related maintenance plan. This field auto-updates after each batch is generated. Its label in the user interface is Date of the first work order in the next batch.
WorkTypeId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Work type associated with the maintenance asset. Work orders generated from the maintenance plan inherit its work type's duration, required skills and products, and linked articles. Maintenance assets covered by the plan use the same work type, though you can update them to use a different one.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

MaintenanceAssetFeed
Feed tracking is available for the object.

MaintenanceAssetHistory
History is available for tracked fields of the object.

MaintenancePlan

Represents a preventive maintenance schedule for one or more assets in field service.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
AccountId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The associated account, which typically represents the customer receiving the maintenance service.
ContactId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The associated contact.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** A brief description of the plan.
DoesAutoGenerateWorkOrders	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Turns on auto-generation of work order batches for a maintenance plan and prohibits the manual generation of work orders via the Generate Work Orders action. If this option is selected, a new batch of work orders is generated for the maintenance plan on the `NextSuggestedMaintenanceDate` listed on each maintenance asset, or on the maintenance plan if no assets are included. If a `GenerationHorizon` is specified, the date of generation is that many days earlier.

Field Name	Details
DoesGenerateUponCompletion	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** If both this option and DoesAutoGenerateWorkOrders are set to true, a new batch of work orders isn't generated until the last work order generated from the maintenance plan is completed. A work order is considered completed when its status falls into one of the following status categories: Cannot Complete, Canceled, Completed, or Closed. If a maintenance plan covers multiple assets, work orders are generated per asset. If a maintenance asset's final work order is completed late, its work order generation is delayed, which may cause a staggered generation schedule between maintenance assets.
EndDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The last day the maintenance plan is valid.
Frequency	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** (Required) Amount of time between work orders. The unit is specified in the FrequencyType field.
FrequencyType	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** (Required) The unit of frequency: • Days • Weeks • Months • Years For example, to perform monthly maintenance visits you need a work order for each visit, so enter 1 as the Frequency and select Months.

Field Name	Details
GenerationHorizon	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Moves up the timing of batch generation if DoesAutoGenerateWorkOrders is set to true. A generation horizon of 5 means the new batch of work orders is generated 5 days before the maintenance asset's (or maintenance plan's, if there are no assets) NextSuggestedMaintenanceDate. The generation horizon must be a whole number.
GenerationTimeframe	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** (Required) How far in advance work orders are generated in each batch. The unit is specified in the GenerationTimeframeType field.
GenerationTimeframeType	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** (Required) The generation timeframe unit: • Days • Weeks • Months • Years For example, if you need work orders for six months, enter 6 and select Months.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.

Field Name	Details
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (LastReferencedDate) but not viewed it.
LocationId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Where the service takes place.
MaintenancePlanNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** (Read Only) An auto-assigned number that identifies the maintenance plan.
MaintenancePlanTitle	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A name for the maintenance plan.
MaintenanceWindowEndDays	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Days after the suggested service date on the work order that its service appointment can be scheduled.
MaintenanceWindowStartDays	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description Days before the suggested service date on the work order that its service appointment can be scheduled. The maintenance window start and end fields affect the Earliest Start Permitted and Due Date fields on the maintenance plan's work orders' service appointments. For example, if you enter 3 for both the maintenance window start and end, the Earliest Start Permitted and the Due Date will be 3 days before and 3 days after, respectively, the Suggested Maintenance Date on each work order. If the maintenance window fields are left blank, the service appointment date fields list their work order's suggested maintenance date.
NextSuggestedMaintenanceDate	**Type** date **Properties** Create, Filter, Group, Sort, Update **Description** The suggested date of service for the first work order (not the date the work order is created). This corresponds to the work order's `SuggestedMaintenanceDate`. You can use this field to enforce a delay before the first maintenance visit (for example, if monthly maintenance should begin one year after the purchase date). Its label in the user interface is Date of the first work order in the next batch. For example, if you want the first maintenance visit to take place on May 1, enter May 1. When you generate work orders, the earliest work order will list a suggested maintenance date of May 1, and the dates on the later work orders will be based on the `GenerationTimeframe` and `Frequency`. Important: Maintenance assets also list a `NextSuggestedMaintenanceDate`, which is initially inherited from the maintenance plan. If the plan has maintenance assets, this date auto-updates on the maintenance assets after each batch is generated, but doesn't update on the maintenance plan itself because batch timing is calculated at the maintenance asset level. If the plan doesn't have maintenance assets, this date auto-updates on the maintenance plan after each batch is generated.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The owner of the maintenance plan.

Field Name	Details
`ServiceContractId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The service contract associated with the maintenance plan. The service contract can't be updated if any child maintenance asset is associated with a contract line item from the service contract.
`StartDate`	**Type** date **Properties** Create, Filter, Group, Sort, Update **Description** The first day the maintenance plan is valid.
`SvcApptGenerationMethod`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** The service appointment generation method. • One service appointment per work order • One service appointment per work order line item If your existing maintenance plans have work orders or work order line items associated with them, you can't change their generation methods. To change pre-existing maintenance plan generation methods, either delete the work orders and regenerate them or delete the maintenance plan and recreate it with the needed generation methods. If Work Order Generation Method is set to One work order per asset, you can't set a Service Appointment Generation Method. If Work Order Generation Method is set to One work order line item per asset, you must select a Service Appointment Generation Method.
`WorkOrderGenerationMethod`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** The work order generation method. • One work order per asset

Field Name	Details
	• One work order line item per asset If your existing maintenance plans have work orders or work order line items associated with them, you can't change their generation methods. To change pre-existing maintenance plan generation methods, either delete the work orders and regenerate them or delete the maintenance plan and recreate it with the needed generation methods. If Work Order Generation Method is left as None, the generation is defaulted to one work order per asset. When One work order line item per asset is set, and all maintenance assets have the same Next Suggested Maintenance Date on the maintenance plan, they are grouped in one work order. However, if maintenance assets have different Next Suggested Maintenance Dates, multiple work orders are created for each date. If Work Order Generation Method is set to One work order per asset, you can't set a Service Appointment Generation Method.
`WorkOrderGenerationStatus`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** (Read Only) Indicates the status of work order generation: • NotStarted—the default value, work order generation has not started • InProgress—work order generation is underway • Completed—work order generation is complete • Unsuccessful—it was not possible to generate work orders You can generate only one batch at a time.
`WorkTypeId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The associated work type. Work orders generated from the maintenance plan inherit its work type's duration, required skills and products, and linked articles. Maintenance assets covered by the plan use the same work type, though you can update them to use a different one.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

MaintenancePlanFeed
Feed tracking is available for the object.

MaintenancePlanHistory
History is available for tracked fields of the object.

MaintenancePlanOwnerSharingRule
Sharing rules are available for the object.

MaintenancePlanShare
Sharing is available for the object.

MaintenanceWorkRule

Represents the recurrence pattern for a maintenance record. This object is available in API version 49.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the line item was last modified. Its label in the user interface is `Last Modified Date`.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the line item was last viewed.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** Name of this maintenance work rule.

Field	Details
NextSuggestedMaintenanceDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The next date on which this rule will generate maintenance items.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The assigned owner of the maintenance work rule.
ParentMaintenancePlanId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The maintenance plan associated with the maintenance work rule.
ParentMaintenanceRecordId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The maintenance record this work rule applies to .
RecurrencePattern	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The RRULE that defines the pattern of recurrence for this work order rule.
SortOrder	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The sort order that applies to this work order rule.

Field	Details
`Title`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The title of this work order rule.
`WorkTypeId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the work type that this work order rule generates.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

MaintenanceWorkRuleFeed
Feed tracking is available for the object.

MaintenanceWorkRuleHistory
History is available for tracked fields of the object.

MaintenanceWorkRuleOwnerSharingRule
Sharing rules are available for the object.

MaintenanceWorkRuleShare
Sharing is available for the object.

ManagedContentInfo

Allows the creation of relationship to Product using ProductMedia. This object is available in API version 49.0 and later.

Supported Calls

`describeSObjects()`

Special Access Rules

You must have the B2B Commerce license and a CMS workspace to access a web store.

Usage

The CMS content import process returns a ManageContentInfo ID for each piece of content. The ManagedContentInfo entity has a 1:1 relationship with ProductMedia. To create this relationship, ProductMedia must be associated with a Product entity, for example, Product > ProductMedia > ManagedContentInfo. Use the ID to associate content uploaded through the API with the ProductMedia entity

MarketingForm

Represents a Pardot marketing form that has been synched to Salesforce. Use forms on your website and landing pages to collect information about visitors and turn anonymous visitors into identified prospects. This object is available in API version 42.0 and later.

Supported Calls

`describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`

Special Access Rules

To access this object, your org must use Pardot and users need the CRM User or Sales User permission set.

Fields

Field Name	Details
`CampaignId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the related campaign.
`ErrorRate`	**Type** percent **Properties** Filter, Nillable, Sort **Description** The percentage of views that led to an error.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort

Field Name	Details
	Description The timestamp that indicates when the current user last viewed a record that is related to this form.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time when the current user last viewed this record. If this value is null, this record might only have been referenced (see LastReferencedDate) and not viewed.
Name	**Type** string **Properties** Filter, Group, Sort **Description** The name of the marketing form.
SubmissionRate	**Type** percent **Properties** Filter, Nillable, Sort **Description** The percentage of the views that led to a form submission.
TotalErrors	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** The total number of times a form error prevented a submission.
TotalSubmissions	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** The total number of times the form was successfully submitted.

Field Name	Details
TotalTrackedLinkClicks	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** The total number of link clicks from your thank you page.
TotalViews	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** The total number of times your form has been viewed. Includes multiple views from the same visitor.
Type	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Specifies the type of marketing form record, either a form or form handler.
UniqueErrors	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** The number of errors generated by separate visitors.
UniqueSubmissions	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** The total number of unique submissions. Removes multiple submissions from the same prospect.
UniqueTrackedLinkClicks	**Type** int

Field Name	Details
	Properties Defaulted on create, Filter, Group, Nillable, Sort **Description** The total number of unique link clicks from your thank you page. Removes multiple clicks from the same prospect.
`UniqueViews`	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** The number of form views by separate visitors.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

MarketingFormFeed
Feed tracking is available for the object.

MarketingLink

Represents a Pardot marketing link record, either a custom redirect or a file, that has been synced to Salesforce. This object is available in API version 42.0 and later.

Supported Calls

`describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`

Special Access Rules

To access this object, your org must use Pardot and users need the CRM User or Sales User permission set.

Fields

Field Name	Details
`CampaignId`	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The ID of the related campaign.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp that indicates when the current user last viewed a record that is related to this marketing link.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time when the current user last viewed this record. If this value is null, this record might only have been referenced (see LastReferencedDate) and not viewed.
Name	**Type** string **Properties** Filter, Group, Sort **Description** The name of the marketing link.
TargetUrl	**Type** url **Properties** Filter, Group, Sort **Description** The target URL of the marketing link.
TotalTrackedLinkClicks	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort

Field Name	Details
	Description The total number of clicks for the redirect. Includes clicks from visitors and identified prospects. When a person clicks the link multiple times, each click is counted in this number.
`Type`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Specifies the type of marketing link record, either a custom redirect or file.
`UniqueTrackedLinkClicks`	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** The number of unique clicks for the redirect. Includes clicks from visitors and identified prospects. Only the first click is counted in this number.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

MarketingLinkFeed
Feed tracking is available for the object.

MatchingRule

Represents a matching rule that is used to identify duplicate records. This object is available in API version 33.0 and later.

A matching rule compares field values to determine whether a record is similar enough to existing records to be considered a duplicate. For example, a matching rule can specify that if the `Email` and `Phone` values of two records match exactly, the records are possible duplicates. Your organization uses matching rules with duplicate rules to define what happens when duplicates are identified.

If the rule is for a Person Account, `SobjectSubType` is automatically set to `PersonAccount`.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

As of Summer '20 and later, only users with the View Setup and Configuration permission can access this object.

Fields

Field Name	Details
BooleanFilter	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Specifies filter logic conditions.
Description	**Type** textarea **Properties** Filter, Group, Nillable, Sort **Description** The description of the matching rule.
DeveloperName	**Type** string **Properties** Filter, Group, Sort **Description** The developer name for the matching rule.
Language	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language selected for your organization.
MasterLabel	**Type** string **Properties** Filter, Group, Sort **Description** The name of the matching rule.

Field Name	Details
MatchEngine	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The match engine used by the matching rule.
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix for matching rules for your organization.
RuleStatus	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Required. The activation status of the matching rule. Values are: • *Inactive* • *Deactivating* • *DeactivationFailed* • *Active* • *Activating* • *ActivationFailed* Important: The only valid values you can declare when deploying a package are *Active* and *Inactive*.
SobjectSubtype	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Read-only. Indicates if the matching rule is defined for the Person subtype of Account. Valid values are: • PersonAccount • None If the rule is for a Person Account, SobjectSubType is automatically set to PersonAccount.

Field Name	Details
SobjectType	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The object for the matching rule.

Usage

Use the Salesforce API to retrieve and view details about MatchingRule and MatchingRuleItem. Use the Salesforce Metadata API to create, update, or delete these objects.

SEE ALSO:

- MatchingRuleItem
- DuplicateRule
- DuplicateResult
- MatchingRule in the Salesforce Metadata API Developer's Guide

MatchingRuleItem

Represents criteria used by a matching rule to identify duplicate records. This object is available in API version 33.0 and later.

A matching rule item determines which field the matching rule uses to identify a duplicate record. It also determines the method used to compare value that two records have for the field. For example, a matching rule item might specify that the `Email` field values of two records must match exactly in order for the records to be considered duplicates.

When a matching rule has multiple matching rule items, it means that multiple fields must match in order for the records to be identified as dupcliates.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

As of Summer '20 and later, only users with the View Setup and Configuration permission can access this object.

Fields

Field Name	Details
`BlankValueBehavior`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Specifies how blank fields affect whether the fields being compared are considered matches. Valid values are: • *`MatchBlanks`* • *`NullNotAllowed`* (default)
`Field`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Indicates which field to compare when determining if a record is similar enough to an existing record to be considered a match.
`MatchingMethod`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Defines how the fields are compared. Choose between the exact matching method and various fuzzy matching methods. Valid values are: • *`Exact`* • *`FirstName`* • *`LastName`* • *`CompanyName`* • *`Phone`* • *`City`* • *`Street`* • *`Zip`* • *`Title`* For details on each matching method, see “Matching Methods Used with Matching Rules” in the Salesforce Help.

Field Name	Details
MatchingRuleId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID for the matching rule.
SortOrder	**Type** int **Properties** Filter, Group, Sort **Description** The order of the matching rule items for a matching rule.

Usage

Use the Salesforce SOAP API to retrieve and view details about MatchingRule and MatchingRuleItem. Use the Salesforce Metadata API to create, update, or delete these objects.

SEE ALSO:

MatchingRule

DuplicateRule

DuplicateResult

MatchingRule in the Salesforce Metadata API Developer's Guide

MessagingChannel

Represents a communication channel that an end user can use to send a message to an agent. A communication channel can be an SMS number, a Facebook page, or another supported messaging channel. This object is available in API version 45.0 and later.

Supported Calls

`create(), describeLayout(), describeSObjects(), query(), retrieve(), search(), update(), upsert()`

Fields

Field Name	Details
BusinessHoursId	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The operating hours for your business, when agents are available. Available only in orgs that use Einstein Bots.
ConsentType	**Type** picklist **Properties** Create, defaultedOnCreate, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The type of consent, or opt-in, that is required to message users on this channel. This field is available in API version 48.0 and later. Possible values are: • DoubleOptIn • ExplicitOptIn • ImplicitOptIn (default value) The property defaultedOnCreate has been removed in API version 51.0 and later. Now the consent type is defaulted to ImplicitOptIn when the consent type is not set on create only for channels that support consents.
ConversationEndResponse	**Type** textarea **Properties** Create, Nillable, Update **Description** Automated response to the customer when the agent ends the conversation. (Optional)
CriticalWaitTime	**Description** Reserved for future use.
Description	**Description** Reserved for future use.
DeveloperName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The developer name for the messaging channel. This value is a concatenation of the messaging platform key and the message type.

Field Name	Details
DoubleOptInPrompt	**Type** textarea **Properties** Create, Nillable, Update **Description** Automated response to the end user to prompt them to doubly opt in to receiving messages.
EngagedResponse	**Type** textarea **Properties** Create, Nillable, Update **Description** Automated response to the customer when the conversation is accepted by the agent. (Optional)
InitialResponse	**Type** textarea **Properties** Create, Nillable, Update **Description** First automated response to the customer for a new conversation. (Optional)
IsActive	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether a channel is active and can receive messages.
IsAuthenticated	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether a user is authenticated to a voice assistant.
IsLinkedRecordOpenedAsSubTab	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field Name	Details
	Description Indicates whether to show the contact as a subtab.
IsoCountryCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** Two-letter ISO 3166-1 alpha-2 code for the country that the phone number is associated with. For example, the code for United States is `US`.
IsRequireDoubleOptIn	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether double opt-in is required (`true`) or not (`false`) for this Messaging channel.
IsRestrictedToBusinessHours	**Description** Reserved for future use.
IsUserMatchByExternalIdOnly	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether to restrict matching on customer by external ID only (and not use the full name).
Language	**Description** Reserved for future use.
LinkingPreference	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Preference for linking a new user that sends a message using this channel. Currently supports contact linking.

Field Name	Details
MasterLabel	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Unique name for the MessagingChannel.
MessageType	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Type of message. Possible values are: • Facebook • Phone • Text • WhatsApp
MessagingPlatformKey	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Unique key for a channel that the end user can message.
OfflineAgentsResponse	**Description** Reserved for future use.
OptInPrompt	**Type** textarea **Properties** Create, Nillable, Update **Description** Automated response to the end user to prompt them to explicitly opt in to receiving messages.
OptInResponse	**Type** textarea **Properties** Create, Defaulted on create, Nillable, Update

Field Name	Details
	Description Automated response to the end user when they opt in to messaging. Maximum API version 48.0
OptOutResponse	**Type** textarea **Properties** Create, Defaulted on create, Nillable, Update **Description** Automated response to the end user when they opt out of messaging. Maximum API version 48.0
OutsideBusinessHoursResponse	**Description** Reserved for future use.
RoutingConfigurationId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Specifies which Omni-Channel routing configuration to use. This field is required when RoutingType is OmniSkills. To learn more, see Create Routing Configurations.
RoutingType	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Type used to support Omni-Channel's different routing methods. • OmniQueue (queue-based routing) • OmniSkills (skills-based routing) When this value isn't set, OmniQueue is used.
TargetQueueId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description Queue in which incoming conversations are placed while waiting for an agent to accept.
`TargetUserId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Messaging User or agent for the conversation. This field is available in API version 50.0 and earlier.

MessagingChannelSkill

Junction object that represents an association between MessagingChannel and Skill. This object is available in API version 45.0 and later.

For example, when we want to use Omni-Channel skills-based routing in Live message, this object maintains the mapping between the messaging channel and the skill.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`MessagingChannelId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the MessagingChannel on page 1876.
`SkillId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the Skill on page 2719.

MessagingConfiguration

Represents the details for a Messaging configuration. This object is available in API version 47.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The API name for this Messaging configuration.
`Language`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language of this Messaging configuration.
`MasterLabel`	**Type** string **Properties** Filter, Group, Sort **Description** The label for the Messaging configuration.
`MessagingServiceUrl`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The URL for the Messaging service.
`ProvisioningServiceUrl`	**Type** string

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** The URL for the provisioning service.

MessagingDeliveryError

Represents a log of triggered outbound failures to verify when a triggered outbound has failed. This object is available in API version 44.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`CorrelationIdentifier`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update
`CreatedById`	**Type** reference **Properties** Defaulted on createFilter, Group, Sort **Description** ID of the user who created the error.
`CreatedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date the error was created.
`DestinationPhoneNumber`	**Type** string

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The recipient of the phone call.
`FailureReason`	**Type** textarea **Properties** Create, Nillable, Update **Description** The provided reason for why the message failed.
`FlowEntity`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update
`FullMessage`	**Type** textarea **Description** Plain error text.
`Id`	**Type** id **Properties** Defaulted on create, Filter, Group, idLookup, Sort **Description** Identifier of the error.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the error has been deleted.
`LastModifiedById`	**Type** reference **Properties** Defaulted on create, Filter, Group, Sort **Description** The ID of the user who last modified the error log.

Field	Details
LastModifiedDate	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date when the Messaging error log was last modified.
MessagingChannelId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the MessagingChannel on page 1876.
MessagingEndUserId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Identifier for the Messaging user.
MessagingTemplateId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the Messaging template used.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Namefield, Sort **Description** Name of the error. Maximum length is 80 characters.
SystemModstamp	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** System modification time for the Messaging delivery error log.

Field	Details
Type	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** The kind of event that occurred. • Error (Default) • Warning

MessagingEndUser

Represents a single address—such as a phone number or Facebook page—communicating with a single Messaging channel. This object is available in API version 45.0 and later

Supported Calls

create(), delete(), describeLayout(), describeSObjects(), getDeleted(), getUpdated(), query(), retrieve(), search(), undelete(), update(), upsert()

Fields

Field	Details
AccountId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the account associated with this Messaging end user.
ContactId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the associated Contact.
HasInitialResponseSent	**Type** boolean

Field	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether an initial response has been sent to the Messaging end user (`true`) or not (`false`).
`IsFullyOptedIn`	**Type** boolean **Properties** Defaulted on create, Filter, Sort **Description** Indicates whether the Messaging end user has opted in to receiving messages (`true`) or not (`false`). This field is available in API version 48.0 and later.
`IsOptedOut`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the Messaging end user has opted out of receiving messages. Maximum API version 48.0. Use `MessagingConsentStatus` and `IsFullyOptedIn` instead.
`IsoCountryCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** The ISO country code associated with the Messaging end user.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort

Field	Details
	Description The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
`Locale`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** Reserved for future use.
`MessageType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** Type of message. Possible values are: • `Facebook` • `Phone` • `Text` • `WhatsApp`
`MessagingChannelId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the Messaging channel associated with the Messaging end user.
`MessagingConsentStatus`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The consent status of the messaging user. This field is available in API version 48.0 and later. Possible values are: • `DoublyOptedIn` • `ExplicitlyOptedIn` • `ImplicitlyOptedIn` • `OptedOut`

Field	Details
MessagingPlatformKey	**Type** string **Properties** Create, Filter, Group, Sort **Description** The phone number or Facebook page ID associated with this Messaging end user.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the Messaging end user.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner associated with this Messaging end user.
ProfilePictureUrl	**Type** url **Properties** Create, Filter, Group, Nillable, Sort **Description** The URL of the Messaging end user's profile picture.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

MessagingEndUserHistory
History is available for tracked fields of the object.

MessagingEndUserOwnerSharingRule
Sharing rules are available for the object.

MessagingEndUserShare
Sharing is available for the object.

MessagingLink

Represents the link between a Messaging Channel and where it's shared. This object is available in API version 47.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`EntityType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Possible values are: • `Account` • `Case` • `Contact` • `CustomEntityDefinition`—Custom Object Definition • `Lead` • `Opportunity`
`MessagingChannelId`	**Type** reference **Properties** Create, Filter, Group, Sort
`RecordTypeId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update
`ShouldAttemptAutoLink`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update
`ShouldPromptCreate`	**Type** boolean

Field	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update

MessagingSession

Represents a session on a Messaging channel. This object is available in API version 47.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`AcceptTime`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The time when an agent accepts an incoming Messaging session.
`AgentMessageCount`	**Type** int **Properties** Nillable **Description** The number of messages sent by the agent during the session.
`AgentType`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of agent that is assigned to the Messaging session. Possible values are: • `Agent` • `Bot` • `BotToAgent`—Bot & Agent • `System`—Used for triggered outbound messages

Field	Details
CaseId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the case associated with this Messaging session.
ChannelEndUserFormula	**Type** string **Properties** Filter, Group, idLookup, Nillable, Sort **Description** A concatenation of the Messaging channel and Messaging user.
ChannelGroup	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The group of the associated Messaging channel.
ChannelIntent	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The intent of the associated Messaging channel.
ChannelKey	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The unique identifier for the associated Messaging channel.
ChannelLocale	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The locale of the associated Messaging channel.

Field	Details
ChannelName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the associated Messaging channel.
ChannelType	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of the associated Messaging channel. Possible values are: • Facebook • Phone • Text • WhatsApp
EndTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort **Description** The time when the Messaging session ended.
EndUserAccountId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the end user's account record.
EndUserContactId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the end user's contact record.
EndUserMessageCount	**Type** int

Field	Details
	Properties Nillable **Description** The number of messages sent by the Messaging end user.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
LeadId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the Lead associated with this Messaging session.
MessagingChannelId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the Messaging channel associated with this Messaging session.
MessagingEndUserId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the Messaging end user associated with this Messaging session.

Field	Details
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name of this Messaging session.
OpportunityId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the opportunity record associated with this Messaging session.
Origin	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The origin of this Messaging session. Possible values are: • AgentInitiated • ConversationClose • InboundInitiated • OptIn—Opt In Status Change • OptOut—Opt Out Status Change • TriggeredOutbound
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the owner associated with this Messaging session.
PreviewDetails	**Type** string **Properties** Nillable **Description** The preview shown to an agent for this Messaging session.

Field	Details
SessionKey	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** The identifier for the Messaging session.
StartTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort **Description** The time when the Messaging session started.
Status	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The status of the Messaging session. Possible values are: • Active • Ended • New • Waiting
TargetUserId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the target user associated with this Messaging session.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

MessagingSessionFeed
Feed tracking is available for the object.

MessagingSessionHistory
History is available for tracked fields of the object.

MessagingSessionOwnerSharingRule
Sharing rules are available for the object.

MessagingSessionShare
Sharing is available for the object.

MessagingTemplate

Represents a Messaging template used to send pre-formatted messages. This object is available in API version 47.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** The description of the Messaging template.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The API name for the Messaging template.
`Language`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the Messaging template.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update

Field	Details
	Description The label of the Messaging template.
`Message`	**Type** textarea **Properties** Create, Update **Description** The body text of the Messaging template.

MetadataPackage

Represents a package that has been developed in the org you're logged in to. Applies to unlocked, unmanaged, first-generation, and second-generation managed packages.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Name`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The name of the package.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** For first-generation and second-generation managed packages, and unlocked packages with namespaces, this field is the namespace prefix assigned to the package. For unmanaged packages, or no-namespace unlocked packages, this field is blank.

Field Name	Details
PackageCategory	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of package. Valid values are: • Application (internal use only) • Module (internal use only) • Package—Represents either an unmanaged package or a first-generation managed package. • Package2—Represents either an unlocked package or a second-generation managed package. The default value is Package. This field is available in API version 49.0 and later.

Usage

Here are examples of the types of API queries you can perform.

Query	String
Show all managed and unmanaged packages in the org	SELECT Name, NamespacePrefix FROM MetadataPackage
Show only managed packages in the org	SELECT Name, NamespacePrefix FROM MetadataPackage WHERE NamespacePrefix <> ''

MetadataPackageVersion

Represents a package version (managed or unmanaged) that has been uploaded from the org you're logged in to.

Supported Calls

describeSObjects(), query(), retrieve()

Fields

Field Name	Details
`BuildNumber`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The build number of the version. For example, if you upload two beta versions, they have build numbers 1 and 2. Then, when you upload a non-beta version, the build number is 3. When you upload a new version, the build number resets to 1.
`IsDeprecated`	**Type** boolean **Properties** Filter, Group, Sort **Description** Indicates whether the package version is deprecated. Available in API version 46.0 and later.
`MajorVersion`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The first number in a package version number. A version number either has an `x.y` format or an `x.y.z` format. The `x` represents the major version, `y` the minor version, and `z` the patch version.
`MetadataPackageId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The 18-character package ID starting with `033`.
`MinorVersion`	**Type** int **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The second number in a package version number. A version number either has an `x.y` format or an `x.y.z` format. The `x` represents the major version, `y` the minor version, and `z` the patch version.
`Name`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The name of the package version.
`PatchVersion`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The third number in a package version number, if present. A version number either has an `x.y` format or an `x.y.z` format. The `x` represents the major version, `y` the minor version, and `z` the patch version.
`ReleaseState`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** If the package version is a beta version, the value is `Beta`. Otherwise, the value is `Released`.

Usage

Here are examples of the types of API queries you can perform.

Query	String
Get all package versions for the package that has a `MetadataPackageID` of 033D00000001xQlIAI	`SELECT Id, Name, ReleaseState, MajorVersion, MinorVersion, PatchVersion FROM MetadataPackageVersion WHERE MetadataPackageId = '033D00000001xQlIAI'`
Get the package version for the package with a specific `MetadataPackageID` and a major version greater than 1	`SELECT Id FROM MetadataPackageVersion WHERE MetadataPackageId ='033D00000001xQlIAI' AND MajorVersion > 1`

Query	String
Get released package versions for the package with a specific MetadataPackageID	SELECT Id FROM MetadataPackageVersion WHERE MetadataPackageId = '033D00000001xQlIAI' AND ReleaseState = 'Released'

Java Code Sample

Suppose you want to push version 3.4.6 of your package to all orgs. Let's write some code to identify the orgs eligible for the upgrade. This example demonstrates how to generate the list of subscriber orgs eligible to be upgraded to version 3.4.6 of a package.

This code sample uses the Web Services Connector (WSC).

```
// Finds all Active subscriber orgs that have the package installed
String PACKAGE_SUBSCRIBER_ORG_KEY_QUERY = "Select OrgKey from PackageSubscribers where
OrgStatus = 'Active' and InstalledStatus = 'I'";

// Finds all MetadataPackageVersions lower than the version given, including the list
// of subscribers for each version
String METADATA_PACKAGE_VERSION_QUERY = "Select Id, Name, ReleaseState, (%s) from"
 + " MetadataPackageVersion where MetadataPackageId = '%s' AND ReleaseState = 'Released'"

 + " AND (MajorVersion < 3 OR (MajorVersion = 3 and MinorVersion < 4)"
 + " OR (MajorVersion = 3 and MinorVersion = 4 and PatchVersion < 6))";

// conn is an EnterpriseConnection instance initialized with a ConnectionConfig object
// representing a connection to the developer org of the package
QueryResult results = conn.query(String.format(METADATA_PACKAGE_VERSION_QUERY,
PACKAGE_SUBSCRIBER_ORG_KEY_QUERY));

// This list will hold all of the PackageSubscriber objects that are eligible for upgrade
// to the given version
List<PackageSubscriber> subscribers = new ArrayList<>();
for (SObject mpvso : results.getRecords()) {

  // Cast the sObject to a MetadataPackageVersion
  MetadataPackageVersion mpv = (MetadataPackageVersion) mpvso;

  // Add subscribers to our list
  if (mpv.getPackageSubscribers() != null) {
   for (SObject psso : mpv.getPackageSubscribers().getRecords()) {
    subscribers.add((PackageSubscriber) psso);
   }
 }
}
```

Next Step

Create a push request using PackagePushRequest.

Metric

The Metric object represents the components of a goal metric such as its name, metric type, and current value.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`CompletionDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The completion date of the metric.
`CurrentValue`	**Type** double **Properties** Create, Defaulted on create, Filter, Nillable, Sort, Update **Description** The current value of the metric.
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** The description of the metric. The maximum length is 65,535 characters.
`DueDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The due date of the metric.
`GoalId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the goal the metric is related to.

Field Name	Details
InitialValue	**Type** double **Properties** Create, Defaulted on create, Filter, Nillable, Sort, Update **Description** The initial value of the metric.
IsCompletionMetric	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Read only. If `true`, the metric measures whether or not the metric is finished. If `false`, the metric measures how much is finished compared to a targeted value.
LastComment	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A comment that provides more context about the metric, such as its status or progress. The maximum length is 255 characters.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp that indicates when a user last viewed a record that is related to this metric.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp that indicates when a user last viewed this metric. If this value is null, this record might have been only referenced (`LastReferencedDate`) and not viewed.

Field Name	Details
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the metric.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the user who owns the metric.
Progress	**Type** percent **Properties** Filter, Nillable, Sort **Description** Read only. The overall progress of the metric.
RecordTypeId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the related record type.
StartDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The start date of the metric.
Status	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The status of the metric. Possible values include:

Field Name	Details
	• Not Started • On Track • Behind • Critical • Completed • Postponed • Canceled • Not Completed
`TargetValue`	**Type** double **Properties** Create, Defaulted on create, Filter, Nillable, Sort, Update **Description** The target value of the metric.
`Weight`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The weight of the metric. The sum of the weights should equal 100%.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

MetricFeed
Feed tracking is available for the object.

MetricHistory
History is available for tracked fields of the object.

MetricOwnerSharingRule
Sharing rules are available for the object.

MetricShare
Sharing is available for the object.

MetricDataLink

The link between the metric and the data source, such as a report.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
DatasourceFieldName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The field name of the data source, such as a report summary field.
DataSourceId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the data source.
LastSynchronizationTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The last time the data was synchronized.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** The name given to the data link record.
TargetId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the metric that the data is linked to.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

MetricDataLinkHistory
History is available for tracked fields of the object.

MetricsDataFile

Represents a data file containing usage metrics on all installations of a managed package in a Salesforce instance. This object is available in API version 30.0 and later.

Supported Calls

`query()`, `delete()`

Fields

Field Name	Details
`MetricsDataFile`	**Type** base64 **Properties** Filter, Query, Sort **Description** A text file containing the usage data encoded in Base 64.
`MetricsDataFileContentType`	**Type** string **Properties** Filter, Query, Sort **Description** The format of the data file. Currently, the only allowed value is `text/csv`.
`MetricsDataFileLength`	**Type** int **Properties** Filter, Query, Sort **Description** The size of the data file in bytes.
`MetricsRunDate`	**Type** dateTime

Field Name	Details
	Properties Filter, Query, Sort **Description** The date when the usage metrics collection job was run.
`MetricsEndDate`	**Type** dateTime **Properties** Filter, Query, Sort **Description** The end time and date for the data collection.
`MetricsStartDate`	**Type** dateTime **Properties** Filter, Query, Sort **Description** The start time and date for the data collection.
`MetricsType`	**Type** picklist **Properties** Filter, Query, Sort **Description** The type of data being collected. The possible values are `CustomObject` and `Visualforce`.
`NamespacePrefix`	**Type** string **Properties** Filter, Query, Sort **Description** The namespace prefix of the package for which data is being collected.
`SendingInstance`	**Type** string **Properties** Filter, Query, Sort **Description** The server instance from which this data was collected, for example, “na8.”

Usage

Use this object to access customer usage metrics for a managed package. Each record contains one day's data, on either custom objects or Visualforce pages, for all organizations in a Salesforce instance that have the package installed. The following data is collected each day.

- **Custom objects** — the number of records stored in each custom object.
- **Visualforce pages** — the number of times each Visualforce page was accessed, the number of unique users who accessed it, and the average loading time (in milliseconds).

The custom objects data is a snapshot that reflects the state of the organization at the time the database was sampled, while the Visualforce data covers usage over a 24-hour period.

This feature is intended for API access only. The owner of the package must write a secondary process to retrieve the metrics data from the reporting organization, and export it to another system for analysis.

The usage metrics data for all production organizations in a given instance is merged and written into a text file, in a specified format, once a day. If an instance doesn't have any organizations with the package installed or any organizations that accessed Visualforce pages in the package, a blank record is created for that day, with `MetricsDataFileLength` set to zero.

In a record for custom objects, each row of the text file contains usage data in the following order.

- Organization ID
- Organization name
- Organization edition
- Organization status
- Name of the custom object
- Number of records of the custom object on the specified day

The custom object count is a snapshot captured once each day. Here's a section of a sample data file for custom objects. It shows there were 3500 and 1500 records in the `Alpha` and `Beta` custom objects, respectively, in the specified customer organization on the specified day.

```
"00Dxx0000001gbk","org1","Enterprise Edition","TRIAL","Alpha", "3500"
"00Dxx0000001gbk","org1","Enterprise Edition","TRIAL","Beta", "1500"
```

In a record for Visualforce pages, each row of the text file contains usage data in the following order.

- Organization ID
- Organization name
- Organization edition
- Organization status
- Package version number
- Name of the Visualforce page
- Number of times the page was accessed
- Number of unique users who accessed the page
- Average loading time of the page, in milliseconds

The Visualforce counts for each organization measure the number of times the page was viewed in the duration between the start and end times. Here's a section of a sample data file for Visualforce pages.

```
"00Dxx0000001gbk","org1","Enterprise Edition","TRIAL","1.0","/apex/gm12__f1","1","1","66.0"
"00Dxx0000001gbk","org1","Enterprise Edition","TRIAL","1.0","/apex/gm12__f2","1","1","128.0"
```

```
"00Dxx0000001gbk","org1","Enterprise Edition","TRIAL","1.0","/apex/gm12__f3","1","1","107.0"
"00Dxx0000001gbf","org1","Enterprise Edition","TRIAL","1.0","/apex/gm12__f1","5","1","73.6"
"00Dxx0000001gbf","org1","Enterprise Edition","TRIAL","1.0","/apex/gm12__f2","1","1","72.0"
"00Dxx0000001gbf","org1","Enterprise Edition","TRIAL","1.0","/apex/gm12__f3","7","1","50.8"
```

MilestoneType

Represents a milestone (required step in a customer support process). This object is available in API version 18.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Summer '20 and later, only Salesforce admins, users with access to the Case, Entitlement, or Work Order objects, and users with the View Setup and Configuration permission can access this object.

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Update **Description** A description of the milestone.
`Name`	**Type** string **Properties** Create, Filter, idLookup, Update **Description** The name of the milestone.
`RecurrenceType`	**Type** picklist **Properties** Create,Update **Description** The type of recurrence for the milestone.

Usage

Use this object to query and manage the milestone type for CaseMilestone records.

SEE ALSO:

CaseMilestone

SlaProcess

MLField

Represents a single field in a data definition. This object is available in API version 50.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`Entity`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The object that contains the field.
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field.

MlIntentUtteranceSuggestion

Represents a customer input, used for training purposes in the feedback loop process of a conversation. Admins can add these inputs to the intent training model. This object is available in API version 51.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
ConfigId	**Type** reference **Properties** Filter, Group, Nillable, Sort
IntentSuggestion	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The recommended intent.
ReviewStatus	**Type** picklist **Properties** Filter, Group, Restricted Picklist, Sort **Description** Possible values are: Ignore, New
Utterance	**Type** string **Properties** Filter, Group, Sort **Description** The text input from the end user.
UtteranceCount	**Type** integer **Properties** Filter, Group, Sort **Description** A count of the Utterance field.

MLPredictionDefinition

Represents a prediction definition that specifies details about the prediction. This object is available in API version 50.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
ApplicationId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The unique ID of the parent AI Application.
DeveloperName	**Type** string **Properties** Filter, Group, Sort **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization.
Language	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language of the prediction. Possible values are: • `da`—Danish • `de`—German • `en_US`—English • `es`—Spanish • `es_MX`—Spanish (Mexico) • `fi`—Finnish • `fr`—French • `it`—Italian • `ja`—Japanese • `ko`—Korean

Field	Details
	• nl_NL—Dutch • no—Norwegian • pt_BR—Portuguese (Brazil) • ru—Russian • sv—Swedish • th—Thai • zh_CN—Chinese (Simplified) • zh_TW—Chinese (Traditional)
MasterLabel	**Type** string **Properties** Filter, Group, Sort **Description** Label that identifies the prediction throughout the Salesforce user interface.
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Specifies the namespace of the prediction, if installed with a managed package.
PredictionField	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Field that the prediction is based on.
PushbackField	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Field that the prediction writes scores to.
Status	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort

Field	Details
	Description The status of the prediction. Possible values are: • `Disabled` • `Draft` • `Enabled`
`Type`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of model that returns the prediction values. Possible values are: • `BinaryClassification` • `DeepLearningIntentClassification` • `DeepLearningNameEntityRecognition` • `GlobalDeepLearningIntentClassification` • `GlobalDeepLearningNameEntityRecognition` • `LanguageDetection` • `MulticlassClassification` • `Regression` • `ScoringSpecificOutcome`

MLRecommendationDefinition

For internal use only.

MobileSettingsAssignment

Represents the assignment of a particular field service mobile settings configuration to a user profile. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
FieldServiceMobileSettingsId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of a set of field service mobile settings.
ProfileId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the profile to associate with the set of field service mobile settings.

MsgChannelLanguageKeyword

Represents the consent configuration for a Messaging channel. This object is available in API version 48.0 and later.

Supported Calls

describeSObjects(), delete(), query(), retrieve(), search()

Fields

Field	Details
CustomKeywords	**Type** textarea **Properties** Nillable **Description** The keywords a Messaging end user can send to receive the Custom Response.
CustomResponse	**Type** textarea **Properties** Nillable

Field	Details
	Description The automated response sent when a Messaging end user sends a Custom Keyword.
`DoubleOptInKeywords`	**Type** textarea **Properties** Nillable **Description** The keywords a Messaging end user can send to doubly opt in to receiving messages.
`HelpKeywords`	**Type** textarea **Properties** Nillable **Description** The keywords a Messaging end user can send to request help during a Messaging session.
`HelpResponse`	**Type** textarea **Properties** Nillable **Description** The automated response sent when a Messaging end user requests help.
`MasterLanguage`	**Type** textarea **Properties** **Description** The language used for this consent configuration.
`MessagingChannelId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the associated Messaging channel.
`OptInConfirmation`	**Type** textarea **Properties** Nillable

Field	Details
	Description The automated response sent when a Messaging end user opts in to receiving messages.
`OptInKeywords`	**Type** textarea **Properties** Nillable **Description** The keywords a Messaging end user can send to explicitly opt in to receiving messages.
`OptOutConfirmation`	**Type** textarea **Properties** Nillable **Description** The automated response sent when a Messaging end user opts out of receiving messages.
`OptOutKeywords`	**Type** textarea **Properties** Nillable **Description** The keywords a Messaging end user can send to opt out of receiving messages.

MyDomainDiscoverableLogin

Represents configuration settings when the My Domain login page type is Discovery. Login Discovery provides an identity-first login experience, where the login page contains the identifier field only. Based on the identifier entered, a handler determines how to authenticate the user. This object is available in API version 45.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`ApexHandlerId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort, Update **Description** The ID of the Apex handler that contains the Discovery authentication logic.
DeveloperName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization.
ExecuteApexHandlerAsId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the user who is executing the handler. Requires Manage User permission.
Language	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the MasterLabel. Possible values are: • da (Danish) • de (German) • en_US (English) • es (Spanish) • es_MX (Spanish - Mexican) • fi (Finnish) • fr (French) • it (Italian)

Field Name	Details
	• `ja` (Japanese) • `ko` (Korean) • `nl_NL` (Dutch) • `no` (Norwegian) • `pt_BR` (Portuguese - Brazilian) • `ru` (Russian) • `sv` (Swedish) • `th` (Thai) • `zh_CN` (Chinese - Simplified) • `zh_TW` (Chinese - Traditional)
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the action link group template.
`UsernameLabel`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Login prompt on login page when the My Domain login page type is Discovery. It supports localization with custom labels.

Usage

Use this object to access the My Domain Login Discovery Page, which is a login page type that prompts users to identity themselves with an email address, phone number, or custom identifier. My Domain Login Discovery performs an interview-based login process, where users are first prompted to provide identity and then authenticated. For example, users receive a verification code that they enter to complete the login process.

MutingPermissionSet

Represents a set of disabled permissions and is used in conjunction with PermissionSetGroup . This object is available in API version 46.0 and later.

Use a muting permission set with a permission set group to mute certain permissions. For instance, you have a subscriber org using a managed package that contains a permission set group. To use the existing permission set group, the subscriber org can disable specific permissions with a muting permission set. Or, perhaps you have a permission set group that contains several permission sets managed by different departments. Use a muting permission set to disable specific permissions based on your organization's needs.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Summer '20 and later, only users who have one of these permissions can access this object:

- View Setup and Configuration
- Manage Session Permission Set Activations
- Assign Permission Sets

Fields

Field Name	Details
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique DeveloperName for each record. If no DeveloperName is specified, performance can slow while Salesforce generates one for each record.
`Language`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the muting permission set. Possible values are: • `da` (Danish) • `de` (German) • `en_US` (English)

Field Name	Details
	• `es` (Spanish) • `es_MX` (Spanish - Mexican) • `fi` (Finnish) • `fr` (French) • `it` (Italian) • `ja` (Japanese) • `ko` (Korean) • `nl_NL` (Dutch) • `no` (Norwegian) • `pt_BR` (Portuguese - Brazilian) • `ru` (Russian) • `sv` (Swedish) • `th` (Thai) • `zh_CN` (Chinese - Simplified) • `zh_TW` (Chinese - Traditional)
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The muting permission set label for the aggregated, disabled permissions.

Usage

Use MutingPermissionSet to disable specified permissions within a permission set group.

Name

Non-queryable object that provides information about foreign key traversals when the foreign key has more than one parent.

This object is used to retrieve information from related records where the related record may be from more than one object type (a polymorphic foreign key). For example, the owner of a case can be either a user or a group (queue). This object allows retrieval of the owner name, whether the owner is a user or a group (queue). You can use a describe call to access the information about parents for an object, or you can use the `who`, `what`, or `owner` fields (depending on the object) in SOQL queries. This object cannot be directly accessed.

Supported Calls

`describeSObjects()`

Fields

Field	Details
Alias	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The user alias. This field contains a value only if the related record is a user.
Email	**Type** email **Properties** Filter, Group, Nillable, Sort **Description** The email address of the user or group (queue).
FirstName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The first name of the user, contact, or lead.
IsActive	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the related record is an active user (true) or not (false). This field contains a value only if the related record is a user.
LastName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The last name of the user, contact, or lead.
LastReferencedDate	**Type** datetime **Properties** Filter, Nillable, Sort

Field	Details
	Description The timestamp when the current user last accessed this record, a record related to this record, or a list view.
LastViewedDate	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (LastReferencedDate) but not viewed it.
MiddleName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The middle name of the user, contact, or lead.
Name	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of the parent of the object queried. If the parent is a user, contact, or lead, the value is a concatenation of the FirstName, MiddleName, LastName, and Suffix fields of the related record.
Phone	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** The phone number of the user. This field contains a value only if the related record is a user.
Profile	**Type** reference **Properties** Filter, Nillable **Description** The Profile of the user. Only populated if the related record is a user.

Field	Details
ProfileId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the user's Profile. Only populated if the related record is a user.
Suffix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name suffix of the user, contact, or lead.
Title	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The title of the user, for example CFO or CEO.
Type	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** A list of the types of sObjects that can be an owner of this object. You can use this field to filter on a type of owner, for example, return only the leads owned by a user.
Username	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Contains the name that a user enters to log into the API or the user interface. The value for this field is in the form of an email address, and is only populated if the related record is a user.
UserRole	**Type** picklist **Properties** Filter, Nillable

Field	Details
	Description Name of the `Role` played by the user. Only populated for user rows.
`UserRoleId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the user role associated with this object.

Usage

To query on relationships where the parent may be more than one type of object, use `who`, `what`, or `owner` relationship fields.

SEE ALSO:

Object Basics

NamedCredential

Represents a named credential, which specifies the URL of a callout endpoint and its required authentication parameters in one definition. A named credential can be specified as an endpoint to simplify the setup of authenticated callouts. This object is available in API version 33.0 and later.

Note: All credentials stored within this entity are encrypted under a framework that is consistent with other encryption frameworks on the platform. Salesforce encrypts your credentials by auto-creating org-specific keys. Credentials encrypted using the previous encryption scheme have been migrated to the new framework.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

As of Spring '20 and later, only users with the View Setup and Configuration permission can access this object.

Fields

Field Name	Details
`AuthProviderId`	**Type** reference

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** Salesforce ID of the authentication provider, which defines the service that provides the login process and approves access to the external system. Only users with the “Customize Application” and “Manage AuthProviders” permissions can view this field. This field is available in API version 39.0 and later.
`AuthTokenEndpointUrl`	**Type** textarea **Properties** Nillable **Description** The URL where SON Web Tokens (JWTs) are exchanged for access tokens. This field is available in API version 46.0 and later.
`CalloutOptionsAllowMergeFieldsInBody`	**Type** boolean **Properties** Filter **Description** For Apex callouts, indicates whether the code can use merge fields to populate HTTP request bodies with org data. This field is available in API version 35.0 and later.
`CalloutOptionsAllowMergeFieldsInHeader`	**Type** boolean **Properties** Filter **Description** For Apex callouts, indicates whether the code can use merge fields to populate HTTP headers with org data. This field is available in API version 35.0 and later.
`CalloutOptionsGenerateAuthorizationHeader`	**Type** boolean **Properties** Filter

Field Name	Details
	Description Indicates whether Salesforce automatically generates a standard authorization header for each callout to the named credential–defined endpoint. This field is available in API version 35.0 and later.
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization.
`Endpoint`	**Type** textarea **Properties** Nillable **Description** The root URL of the endpoint.
`JwtAudience`	**Type** textarea **Properties** Nillable **Description** External service or other allowed recipients for the JSON Web Token. Written as JSON, with a quoted string for a single audience and an array of quoted strings for multiple audiences. Single audience example: `“aud1”`. Multiple audiences example: `[”aud1”, “aud2”, “aud3”]`. This field is available in API version46.0 and later.
`JwtFormulaSubject`	**Type** string

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** Formula string calculating the JSON Web Token's subject. API names and constant strings, in single quotes, can be included. Allows a dynamic Subject unique per user requesting the token. For example, `'User='+$User.Id`. Use this field when `PrincipalType` is set to `PerUser`. Corresponds to Per User Subject in the user interface. This field is available in API version 46.0 and later.
`JwtIssuer`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Specify who issued the JSON Web Token using a case-sensitive string. This field is available in API version 46.0 and later.
`JwtTextSubject`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Static text, without quotes, that specifies the JSON Web Token subject. Use this field when `PrincipalType` is set to `NamedUser`. Corresponds to Named Principal Subject in the user interface. This field is available in API version 46.0 and later.
`JwtValidityPeriodSeconds`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of seconds that the JSON Web Token is valid. This field is available in API version 46.0 and later.
`Language`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language of the `MasterLabel`.

Field Name	Details
MasterLabel	**Type** string **Properties** Filter, Group, Sort **Description** The master label for the named credential. This display value is the internal label that doesn't get translated.
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation.
PrincipalType	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Tracks users who are accessing the external system. Anonymous implies that a user identity isn't specified for external system access. Named Principal uses one user identity for all users to access the external system.

Usage

Use the NamedCredential object to query named credentials in your organization.

Note: Some named credential fields rely on per-user authentication to connect with an external system. If an admin edits one of these fields, then the previously authenticated credentials can get invalidated, requiring individual users to reauthenticate.

SEE ALSO:

ExternalDataUserAuth

ExternalDataSource

NamespaceRegistry

Represents a namespace that you can link to scratch orgs that were created from your org's Dev Hub. You use the namespace when developing, packaging, and releasing an app. You can't create this object with the API. Use the **Link Namespace** action in the Dev Hub graphical interface to insert a `NamespaceRegistry` record. This object is available in API version 41.0 and later.

Supported Calls

`delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`

Fields

Field Name	Details
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** The name of this namespace registry entry.
`NamespaceOrg`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The org ID of the Developer Edition org where you've registered the namespace you want to link.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Sort **Description** The namespace prefix that you want to link to the scratch org.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

NamespaceRegistryFeed
Feed tracking is available for the object.

NamespaceRegistryHistory
History is available for tracked fields of the object.

SEE ALSO:

ActiveScratchOrg

ScratchOrgInfo

NavigationLinkSet

Represents the navigation menu in an Experience Cloud site. A navigation menu consists of items that users can click to go to other parts of the site. This object is available in API version 35.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

`create()`, `delete()`, `update()`, and `upsert()` are available in API version 45.0 and later.

Special Access Rules

Navigation menus are available only in Experience Cloud sites created using the Customer Service template.

Fields

Field Name	Details
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update Create and Update are available in API version 45.0 and later. **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization.
`Language`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update

Field Name	Details
	Create, Defaulted on create, Nillable, and Update are available in API version 45.0 and later. **Description** Language for the navigation menu. Valid values are: • Chinese (Simplified): `zh_CN` • Chinese (Traditional): `zh_TW` • Danish: `da` • Dutch: `nl_NL` • English: `en_US` • Finnish: `fi` • French: `fr` • German: `de` • Italian: `it` • Japanese: `ja` • Korean: `ko` • Norwegian: `no` • Portuguese (Brazil): `pt_BR` • Russian: `ru` • Spanish: `es` • Spanish (Mexico): `es_MX` Spanish (Mexico) defaults to Spanish for customer-defined translations. • Swedish: `sv` • Thai: `th` The Salesforce user interface is fully translated to Thai, but Help is in English.
MasterLabel	**Type** string **Properties** Create, Filter, Group, Sort, Update Create and Update are available in API version 45.0 and later. **Description** Label for the navigation menu.
NetworkId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort Create is available in API version 45.0 and later. Update is available in API versions 45.0 to 47.0.

Field Name	Details
	Description ID of the Experience Cloud site.

NavigationMenuItem

Represents a single menu item in a NavigationLinkSet. Use this object to create, delete, or update menu items in your Experience Cloud site's navigation menu. This object is available in API version 35.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Navigation menus are available only in Experience Cloud sites created using Experience Builder templates. To use navigation menus in the Build Your Own template, you must build a custom navigation menu component.

Fields

Field Name	Details
`AccessRestriction`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Determines if the menu item is available to guest users who aren't required to log in to the Experience Cloud site.
`DefaultListViewId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** If the value of the `Type` field is SalesforceObject, the value is the ID of the default list view for the object.
`DraftRowID`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort

Field Name	Details
	Description The ID of the draft navigation menu item. The ID is unique within your organization.
Label	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The text that appears in the navigation menu for this item.
NavigationLinkSetId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The navigation menu that this item is included in.
ParentId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The parent navigation menu.
Position	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The location of the menu item in the navigation menu.
Status	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** Represents if the navigation menu item is published or not. The values can only be DRAFT, LIVE, or null. In API versions 42 and earlier, if the Status field is not set, the field defaults to LIVE. When queried and Status is not part of the query filter, only the NavigationMenuItem objects with a status of LIVE return. In API versions 43 and later, if the Status field is not set, the field defaults to DRAFT. When queried

Field Name	Details
	and Status is not part of the query filter, all NavigationMenuItem objects return regardless of status.
`Target`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** If `Type` is ExternalLink or InternalLink, the target is the URL that the link points to. For ExternalLink, your entry looks like this: *`http://www.salesforce.com`*. For InternalLink, use a relative URL, such as *`/contactsupport`*.
`TargetPrefs`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** If `Type` is ExternalLink, determines whether a navigation menu item opens in the same tab.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of navigation menu item. The available values are: • SalesforceObject—Available objects include accounts, cases, contacts, and custom objects. • ExternalLink—Links to a URL outside of your Experience Cloud site. For example, *`http://www.salesforce.com`*. • Event—An event, such as logging in, logging out, or switching accounts. Event is internal only and can't be used in custom components. • GlobalAction—Enables users to create object records, but the new record has no relationship with other records. • InternalLink—Links to a relative URL inside your Experience Cloud site. For example, *`/contactsupport`*. • NavigationalTopic—A dropdown list with links to the navigational topics in your Experience Cloud site. • SystemLink—A system link, such as a link to Experience Builder, Workspaces, or Salesforce setup.

Usage

You can add up to 20 navigation menu items. You can translate navigation menu items using the Translation Workbench.

NavigationMenuItemLocalization

Represents the translated value of a navigation menu item in an Experience Cloud site. This object is available in API version 36.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Navigation menus are available only in Experience Cloud sites created using Experience Builder templates. To use navigation menus in the Build Your Own template, you must build a custom navigation menu component.

Fields

Field Name	Details
`Language`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The language of the translated navigation menu item. The picklist contains the following supported languages: • Chinese (Simplified): `zh_CN` • Chinese (Traditional): `zh_TW` • Danish: `da` • Dutch: `nl_NL` • English: `en_US` • Finnish: `fi` • French: `fr` • German: `de` • Italian: `it` • Japanese: `ja` • Korean: `ko` • Norwegian: `no`

Field Name	Details
	• Portuguese (Brazil): `pt_BR` • Russian: `ru` • Spanish: `es` • Spanish (Mexico): `es_MX` Spanish (Mexico) defaults to Spanish for customer-defined translations. • Swedish: `sv` • Thai: `th` The Salesforce user interface is fully translated to Thai, but Help is in English.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the navigation menu item that this translated value applies to.
`Value`	**Type** string **Properties** Create, Filter, Sort, Update **Description** The translated text for the navigation menu item. Label is **Translation Text**.

Network

Represents an Experience Cloud site. Salesforce Experience Cloud lets you create branded spaces for your employees, customers, and partners. You can customize and create experiences, whether they're communities, sites, or portals, to meet your business needs, then transition seamlessly between them. Experience Cloud sites let you share information, records, and files with coworkers and stakeholders all in one place. This object is available in API version 26.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`, `update()`

Special Access Rules

This object is available only when your org has digital experiences enabled.

Fields

Field Name	Details
`AllowedExtensions`	**Type** textarea **Properties** Filter, Nillable, Sort, Update **Description** Specifies the types of files allowed in your site. This list of file types lets you control what members upload and also prevents spammers from polluting your site with inappropriate files. Available in API version 36.0 and later. Separate file types with a comma (for example: *`jpg,docx,txt`*). You can enter lowercase and uppercase letters. You can enter up to 1,000 characters. To allow all file types, leave this field empty.
`CaseCommentEmailTemplateId`	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** ID of the email template used when submitting a comment on a case. This field is available in API version 28.0 and later.
`ChangePasswordEmailTemplateId`	**Type** reference **Properties** Filter, Group, Sort, Update

Field Name	Details
	Description ID of the email template used when notifying users that their password has been reset.
ChgEmailVerNewEmailTemplateId	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** ID of the email template used when notifying users that their email address has been changed. This email is sent to the user's new email address.
ChgEmailVerOldEmailTemplateId	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** ID of the email template used when notifying users that their email address has been changed. This email is sent to the user's old email address.
Description	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** Description of the site.
EmailFooterLogoId	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** ID of the Document object that displays as an image in the footer of Chatter emails.
EmailFooterText	**Type** string **Properties** Filter, Nillable, Sort, Update **Description** Text that displays in the footer of Chatter emails.

Field Name	Details
EmailSenderAddress	**Type** email **Properties** Filter, Group, Sort **Description** Read only. Email address from which emails are sent. Note: To change the EmailSenderAddress value, you must first specify NewSenderAddress, which triggers the sending of an address change verification email. After you complete the address verification process, EmailSenderAddress changes to the specified NewSenderAddress.
EmailSenderName	**Type** string **Properties** Filter, Group, Sort, Update **Description** Name from which emails are sent.
FirstActivationDate	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** The date the site was first activated. This field is available in API version 34.0 and later. If the site was activated or inactive before the release of API version 34.0, this field returns the date that the site was first created.
ForgotPasswordEmailTemplateId	**Type** reference **Properties** Filter, Group, Sort, Update **Description** ID of the email template used when users forget their password.
LockoutEmailTemplateId	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description ID of the email template used when users try to reset their password after locking themselves out because of too many login attempts. This field is available in API version 43.0 and later.
`MaxFileSizeKb`	**Type** int **Properties** Filter, Group, Nillable, Sort, Update **Description** Specifies the maximum file size (in KBs) that members can upload in your site. Available in API version 36.0 and later. Enter a number between 3072 KB and your org's maximum file size. To use the default limit of 2 GB, leave this field empty.
`Name`	**Type** string **Properties** Filter, Group, Sort, Update **Description** The name of the site.
`NewSenderAddress`	**Type** email **Properties** Filter, Group, Nillable, Sort, Update **Description** Email address that has been entered as the new value for `EmailSenderAddress` but hasn't been verified yet. After a user has requested to change the sender email address and has successfully responded to the verification email, the `NewSenderAddress` value overwrites the value in `EmailSenderAddress`. This value becomes the email address from which emails are sent. Note: • If verification is pending for a new email address and you set `NewSenderAddress` to null, the verification request is canceled. • `NewSenderAddress` is automatically set to null after `EmailSenderAddress` has been set to the new verified address. • If verification is pending for a new email address, and you specify a different new address for this field, only the latest value is retained and used for verification.

Field Name	Details
`OptionsActionOverrideEnabled`	**Type** boolean **Properties** Filter, Update **Description** Override the action that occurs when users click a default button, like New or Edit, with a Lightning component. For example, show a custom window instead of the one that Salesforce provides. Assign action overrides in the Object Manager. In the UI, this setting is available in the Administration Workspace, under **Administration** > **Preferences** under Experience Management This field is available in API version 49.0 and later.
`OptionsAllowInternalUserLogin`	**Type** boolean **Properties** Filter, Update **Description** Specifies whether internal users can log in with their internal credentials on the site login page. This field is available in API version 37.0 and later.
`OptionsAllowMembersToFlag`	**Type** boolean **Properties** Filter, Update **Description** Determines whether users can flag posts, comments, or files as inappropriate. This field is available in API version 29.0 and later. The ability to flag files is available in version 30.0 and later.
`OptionsDirectMessagesEnabled`	**Type** boolean **Properties** Filter, Update **Description** Controls the availability of direct messages in an Experience Builder site. T his field is available in API version 39.0 and later.
`OptionsEnableTalkingAboutStats`	**Type** boolean

Field Name	Details
	Properties Filter, Update **Description** Determines whether site users see how many people are discussing a topic. The number of people discussing the topic appears as the user types the topic and the system gives topic suggestions. This field is available in API version 41.0 and later.
OptionsEnableTopicAssignmentRules	**Type** boolean **Properties** Filter, Update **Description** When true, displays knowledgeable people in key areas, for example, on Topic Detail pages.
OptionsGatherCustomerSentimentData	**Type** boolean **Properties** Filter, Update **Description** When true, collects data about user likes, upvotes, and downvotes.
OptionsGuestChatterEnabled	**Type** boolean **Properties** Filter, Update **Description** Specifies whether guest users can access public Chatter groups in the site without logging in.
OptionsGuestFileAccessEnabled	**Type** boolean **Properties** Filter, Update **Description** When true, lets guest users view asset files and CMS content that's available to the site. Guest users can access shared asset files and published CMS content that's made for external use, even if it isn't used. Shared asset files include images that are associated with topics, recognition badges, branding, and account branding. This preference is automatically enabled if public access is enabled at the page or site level in Experience Builder.

Field Name	Details
`OptionsGuestMemberVisibility`	**Type** boolean **Properties** Filter, Update **Description** When true, lets guest users see who else is part of the site, including non-guest users. In the UI, this setting appears in the Administration Workspace under **Administration** > **Preferences** . Available in API version 47.0 and later.
`OptionsInvitationsEnabled`	**Type** boolean **Properties** Filter, Update **Description** Determines whether users can invite others to the site.
`OptionsKnowledgeableEnabled`	**Type** boolean **Properties** Filter, Update **Description** Determines whether users can see knowledgeable people for topics and endorse people for topics.
`OptionsMemberVisibility`	**Type** boolean **Properties** Filter, Update **Description** Controls user visibility on a per-site basis. If true, the See other members of this site preference is enabled for the selected site. This field is available in API version 45.0 and later.
`OptionsMobileImageOptimizationEnabled`	**Type** boolean **Properties** Filter, Update **Description** If true, file asset images are optimized for mobile display. This field is available in API version 45.0 and later.

Field Name	Details
OptionsNetworkSentimentAnalysis	**Type** boolean **Properties** Filter, Update **Description** If true, enables sentiment analysis in a site. In the UI, this setting is available in the Administration Workspace, under **Administration** > **Preferences**. This field is available in API version 40.0 and later.
OptionsNicknameDisplayEnabled	**Type** boolean **Properties** Filter, Update **Description** Determines whether user nicknames display instead of their first and last names in most places in the site. A few restrictions to keep in mind about nickname display: • Records and user lookups on records show full names. Keep in mind, though, that you can control record and user visibility with sharing rules. • Mobile notifications in the Salesforce mobile app show full names. You can turn off mobile notifications in the app to avoid this display. • Searches by first, last, and full names aren't restricted and return matches, but the search results display only nicknames. Global search auto-complete recommendations show any first, last, and full names that the user has searched by or accessed via a record or another location. The recent items list also shows first, last, and full under the same conditions.
OptionsPrivateMessagesEnabled	**Type** boolean **Properties** Filter, Update **Description** Determines whether users can send and receive Chatter messages in the site.
OptionsProfileBasedLayoutsForKnowledgeSearchEnabled	**Type** boolean **Properties** Filter, Update **Description** When true, provides a grid layout for Knowledge search results. With grid layout in place, you can edit search profile layouts on the Knowledge object to show and hide different search result fields for different profiles. When you enable the

Field Name	Details
	standard grid layout, search-term highlighting isn't available. This field is available in API version 51.0 and later.
OptionsRecognitionBadgingEnabled	**Type** boolean **Properties** Filter, Update **Description** Determines whether Recognition Badges is enabled for the site.
OptionsReputationEnabled	**Type** boolean **Properties** Filter, Update **Description** Determines if reputation is calculated and displayed for members. This field is available in API version 31.0 and later.
OptionsReputationRecordConversationsDisabled	**Type** boolean **Properties** Filter, Update **Description** Disables the feed on reputation records.
OptionsSelfRegistrationEnabled	**Type** boolean **Properties** Filter, Update **Description** Determines whether customers and partners can self-register to join the site. Customers and partners are users with External Identity, Community, Customer Portal, or partner portal licenses. If `true`, displays a **Not a member?** link on the login page that points to the default self-registration page. This field is available in API version 28.0 and later.
OptionsSendWelcomeEmail	**Type** boolean **Properties** Filter, Update **Description** Determines whether a welcome email is sent when a new user is added to the site.

Field Name	Details
`OptionsShowAllNetworkSettings`	**Type** boolean **Properties** Filter, Update **Description** Determines whether settings in Experience Management that were hidden based on how you set up your site are visible or remain hidden. This field is available in API version 33.0 and later.
`OptionsSiteAsContainerEnabled`	**Type** boolean **Properties** Filter, Update **Description** Determines whether the site is an Experience Builder site (`true`) or a Salesforce Tabs + Visualforce site (`false`). This field is available in API version 29.0 and later.
`OptionsThreadedDiscussionsEnabled`	**Type** boolean **Properties** Filter **Description** Indicates whether threaded discussions are enabled for the site. Available in API version 44.0 and later.
`OptionsTopicSuggestionsEnabled`	**Type** boolean **Properties** Filter, Update **Description** Enables topic suggestions when users write posts. This field is available in API version 41.0 and later. The ability to flag files is available in version 30.0 and later.
`OptionsUpDownVoteEnabled`	**Type** boolean **Properties** Filter, Update **Description** Determines whether up and down voting is enabled for the site.

Field Name	Details
	This field is available in API version 41.0 and later.
SelfRegProfileId	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** ID of the profile assigned to users who self-register. Only applies if self-registration is enabled for the site. This field is available in API version 29.0 and later.
Status	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Status of the site. Available values are: • `Live`—The site is online and members can access it. Label is `Published`. • `DownForMaintenance`—The site was previously published, but was taken offline. Members with the Create and Set Up Experiences permission can still access the setup for offline sites regardless of profile or membership. Members aren't able to access offline sites, but they still appear in the user interface dropdown menu as `SiteName (Offline)`. Label is `Offline`. • `UnderConstruction`—The site hasn't yet been published. When a user's profile is associated with the site, and they have Create and Set Up Experiences permission, they can access sites in this status. After a site is published, it can never be in this status again. Label is `Preview`.
UrlPathPrefix	**Type** string **Properties** Filter, Group, Sort, Update **Description** The UrlPathPrefix is a unique string at the end of the URL for the site. For example, in the site URL *`SitesSubdomainName`*`.force.com/customers`, `customers` is the `UrlPathPrefix`.
VerificationEmailTemplateId	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description ID of the email template used when users must verify their identity, for example, when they log in without a password or from a new device. This field is available in API version 44.0 and later.
`WelcomeEmailTemplateId`	**Type** reference **Properties** Filter, Group, Sort, Update **Description** ID of the email template used when sending welcome emails to new members.

Usage

Use this object to find, view, and update sites in your org. If you're assigned the Modify All Data, View All Data, or Create and Set Up Experiences permission, you can view all sites in the org. Users without these permissions see only the Preview or Published sites that they're members of. If you're assigned the Create and Set Up Experiences permission, you can customize site settings.

NetworkActivityAudit

Represents an audit trail of moderation actions in Experience Cloud sites. This object is available in API version 30.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is available only when your org has digital experiences enabled.

Fields

Field Name	Details
`Action`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update

Field Name	Details
	Description The moderation action a member performed on a post, comment, or file in an Experience Cloud site. Values are: • Flagged as Inappropriate—A member flagged a post, comment, or file as inappropriate. • Flagged as Spam - A member flagged a post, comment, or file as spam. • Unflagged—A member removed the flag from a post, comment, or file. • RemovedFlags—A moderator removed all flags from a post, comment, or file. • DeletedFlaggedItem—A moderator deleted a flagged post, comment, message, or file. • DeletedPendingReviewItem—A moderator deleted a post or comment with pending status. • ModerationRuleFlag—A moderation rule flagged member-generated content. • ModerationRuleBlock—A moderation rule blocked member-generated content. • ModerationRuleReplace—A moderation rule replaced member-generated content. • ModerationRuleReview—A moderation rule sent member-generated content to be reviewed and approved by a moderator. • ModerationRuleFreeze—A moderation rule froze a member because they created content too frequently within a specific time frame. • ModerationRuleNotify—A moderation rule notified moderators because a member created content too frequently within a specific time frame.
`Description`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Notes entered by the user. If the entity being tracked is a file, records the version number of the file when it was flagged.
`EntityCreatedById`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the user that created the entity being tracked.

Field Name	Details
EntityId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the entity that is being tracked. The following entities are tracked: ChatterMessage, ContentDocument, ContentVersion, FeedComment, and FeedItem.
EntityType	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The key prefix of the entity being tracked.
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the item being tracked.
NetworkId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the Experience Cloud site where the moderation action was performed.
ParentEntityId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the parent of the entity on which an action was performed. The following entities are tracked: CollaborationGroup, DirectMessage, and User.
ParentEntityType	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description The key prefix of the parent of the entity being audited.

Usage

Use this object to view an audit trail of moderation activity for your Experience Cloud sites. You must have the Modify All Data permission to access this object.

Users with Moderate Experiences Feeds, Moderate Experiences Files, or View All Data can view the audit trail using reports in the Salesforce user interface.

NetworkAffinity

Represents a junction object that associates a user profile with a Network object, that is, with an Experience Cloud site. Use NetworkAffinity to assign a default Experience Cloud site to a user profile. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

To work with the NetworkAffinity object, you must have View Setup or Customize Application permission.

Fields

Field Name	Details
`NetworkId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the default Experience Cloud site associated with a user profile.
`ProfileId`	**Type** reference **Properties** CreateFilter, Group, Sort, Update **Description** ID of the user profile the default Experience Cloud site is assigned to.

Usage

The default Experience Cloud site allows you to stamp site-agnostic email notifications to all users with that profile with the selected site's branding. The default Experience Cloud site also becomes the target destination for email notification links. Site-agnostic email notifications include notifications about records, such as cases, accounts, and opportunities.

The `NetworkId` field is not updatable through the API in Workbench, Apex, or SOAP. If you want to change the value for `NetworkId`, you must delete the record and create one with the right value.

NetworkDiscoverableLogin

Represents the Login Discoverable page from where customers and partners log in to an Experience Cloud site. Customers and partners are users with an External Identity license or any communities license for Experience Cloud.This object is available in API version 44.0 and later

Supported Calls

`create()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`ApexHandlerId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the Apex handler created by the Login Discovery page type.
`ExecuteApexHandlerAsId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the user who is executing the handler.
`NetworkId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update Unique **Description** The ID of `NetworkId` is unique within your org.

Field Name	Details
`UsernameLabel`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Log in prompt on login page when the login page type is Login Discovery.

Usage

Use this object to access the Login Discovery Page, which is a login page type that prompts users to identify themselves with an email address, phone number, or custom identifier. DiscoverableLogin performs an interview-based login process, where users are first prompted to provide identity and then authenticated. For example, users receive a verification code that they enter to complete the login process.

Note: The NetworkDiscoverableLogin object is created when **Login Discovery Page** is selected as the login page type on the Login & Registration (L&R) page. If you later switch to another login page type, such as a Visualforce Page or Experience Builder Page, the object isn't deleted. The object persistence means you can't delete the Apex class associated with the NetworkDiscoverableLogin object. To delete the Apex class, return to the L&R page and change the login page type back to **Login Discovery page**. Select another Apex class, and then you can delete the first one.

NetworkFeedResponseMetric

Represents an object that stores the date and time values of question posts. It captures information for question creation, answer creation, and when an answer is marked as best answer This object is available in API version 51.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

The NetworkFeedResponseMetric object is available only if both NetworksEnabled and ChatterEnabled org preferences are enabled.

Fields

Field	Details
`BestCommentDateTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Represents the date and time a user created an answer that was later marked as best answer.

Field	Details
BestCommentId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Represents the comment that was marked as the best answer.
FeedItemCreatedById	**Type** reference **Properties** Filter, Group, Sort **Description** Represents the user who created the feed item.
FeedItemDateTime	**Type** dateTime **Properties** Filter, Sort **Description** Represents the date and time when the feed Item was created.
FeedItemId	**Type** reference **Properties** Filter, Group, Sort **Description** Represents the unique ID of the question post.
FirstCommentDateTime	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Represents the date and time when the first comment was created.
FirstCommentId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Represent the first comment on a feed Item.

Field	Details
MarkedAsBestCommentDateTime	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Represents the date and time the user marked the answer as best answer.
NetworkId	**Type** reference **Properties** Filter, Group, Sort **Description** Represents where the feed item was created.
ParentRecordId	**Type** reference **Properties** Filter, Group, Sort **Description** Represents the parent record. Parent records can include records like user, account, or group.

NetworkMember

Represents a member of an Experience Cloud site. Members can be either users in your company or external users with portal profiles. This object is available in API version 26.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`, `update()`

Special Access Rules

This object is available only when your org has digital experiences enabled.

Fields

Field Name	Details
DefaultGroupNotificationFrequency	**Type** picklist

Field Name	Details
	Properties Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. The default frequency for sending the member's group email notifications when the member joins groups in the Experience Cloud site. The valid values are: • `P`—Email on every post • `D`—Daily digests • `W`—Weekly digests • `N`—Never The default value is `W`. In sites, the `Email on every post` option is disabled once more than 10,000 members choose this setting for the group. All members who had this option selected are automatically switched to `Daily digests`. However, this field is not currently enabled. These values are reserved for future use.
`DigestFrequency`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. The frequency for sending the member's personal email digest for the Experience Cloud site. The valid values are: • `D`—Daily • `W`—Weekly • `N`—Never The default value is `D`. However, daily and weekly personal digests aren't currently available in sites. These values are reserved for future use.
`LastChatterActivityDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** The last time the member posted or commented in the Experience Cloud site.
`MemberId`	**Type** reference

Field Name	Details
	Properties Filter, Group, Sort **Description** The ID of a person who is a member of an Experience Cloud site.
`NetworkId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the Experience Cloud site that the member is part of.
`PreferencesDisableAllFeedsEmail`	**Type** boolean **Properties** Filter, Update **Description** When `false`, the member can automatically receive email for updates in the Experience Cloud site, based on the types of feed emails and digests the member has enabled.
`PreferencesDisableBestAnswerEmail`	**Type** boolean **Properties** Filter, Update **Description** When `false`, the member automatically receives email when someone selects their answer to a post as best. Available in API 46.0 and later.
`PreferencesDisableBookmarkEmail`	**Type** boolean **Properties** Filter, Update **Description** When `false`, the member automatically receives email every time someone comments on a feed item after the member has bookmarked it.
`PreferencesDisableChangeCommentEmail`	**Type** boolean

Field Name	Details
	Properties Filter, Update **Description** When `false`, the member automatically receives email every time someone comments on a change the member has made, such as an update to their profile.
`PreferencesDisableDirectMessageEmail`	**Type** boolean **Properties** Filter, Update **Description** When `false`, the member automatically receives email every time someone sends them a direct message in the Experience Cloud site.
`PreferencesDisableEndorsementEmail`	**Type** boolean **Properties** Filter, Update **Description** When `false`, the member automatically receives email every time someone endorses them for a topic.
`PreferencesDisableFollowersEmail`	**Type** boolean **Properties** Filter, Update **Description** When `false`, the member automatically receives email every time someone in the Experience Cloud site starts following the member.
`DisableItemFlaggedEmail`	**Type** boolean **Properties** Filter, Update **Description** When `false`, the user automatically receives email every time a member flags a post or comment. This setting only applies for community moderators (with the Moderate Experiences Feeds permission) and group owners or managers. This field is available in API version 29.0 and later.

Field Name	Details
PreferencesDisableLaterCommentEmail	**Type** boolean **Properties** Filter, Update **Description** When `false`, the member automatically receives email every time someone comments on a feed item after the member has commented on the feed item.
PreferencesDisableLikeEmail	**Type** boolean **Properties** Filter, Update **Description** When `false`, the member automatically receives email every time someone comments on a feed item after the member has liked the feed item.
PreferencesDisableMarketingCloudEmail	**Type** boolean **Properties** Filter, Update **Description** When `false`, the member automatically receives marketing emails sent by Journey Builder. Available in API version 41.0 and later.
PreferencesDisableMentionsPostEmail	**Type** boolean **Properties** Filter, Update **Description** When `false`, the member automatically receives email every time the member is mentioned in posts.
PreferencesDisableMessageEmail	**Type** boolean **Properties** Filter, Update **Description** When `false`, the member automatically receives email every time the member is sent a Chatter message.

Field Name	Details
PreferencesDisableProfilePostEmail	**Type** boolean **Properties** Filter, Update **Description** When `false`, the member automatically receives email every time someone posts to the member’s profile.
PreferencesDisableSharePostEmail	**Type** boolean **Properties** Filter, Update **Description** When `false`, the member automatically receives email every time the member’s post is shared.
PreferencesDisCommentAfterLikeEmail	**Type** boolean **Properties** Filter, Update **Description** When `false`, the member automatically receives email every time someone comments on a post the member has liked.
PreferencesDisMentionsCommentEmail	**Type** boolean **Properties** Filter, Update **Description** When `false`, the member automatically receives email every time the member is mentioned in comments.
PreferencesDisProfPostCommentEmail	**Type** boolean **Properties** Filter, Update **Description** When `false`, the member automatically receives email every time someone comments on posts on the member’s profile.
ReputationPoints	**Type** double

Field Name	Details
	Properties Filter, Sort, Update **Description** The number of reputation points the user has accumulated by performing actions in the Experience Cloud site.

Usage

Use this object to query members of a certain Experience Cloud site and to update their email notification settings. If you have Modify All Data, View All Data, or Create and Set Up Experiences, you can view all members of any Experience Cloud site, regardless of your own membership. If you have Modify All Data or Create and Set Up Experiences, you can also update any member's email settings. Users without these permissions can update their own email settings and can see members of the Experience Cloud sites that they're also members of.

Tip: You can directly update reputation points for a member via the Salesforce API. You can also use Apex triggers to send custom notifications based on changes to reputation points.

NetworkMemberGroup

Represents a group of members in an Experience Cloud site. Members can be either users in your internal org or external users assigned portal profiles. An administrator adds members to an Experience Cloud site by adding a profile or a permission set, and any user with the profile or permission set becomes a member of the site. This object is available in API version 26.0 and later.

Note: If a Chatter customer (from a customer group) is assigned a permission set that is also associated with an Experience Cloud site, the Chatter customer won't be added to the site.

Prior to API version 27.0, this object was called NetworkProfile.

Supported Calls

`create()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`

Note: The `upsert()` call is not supported for this object.

Special Access Rules

This object is available only when your org has digital experiences enabled.

Fields

Field Name	Details
`AssignmentStatus`	**Type** picklist

Field Name	Details
	Properties Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** The status of a profile or permission set within an Experience Cloud site. Values are: • `Added`—Users with this profile or permission set are members. • `Waiting for Add`—The profile or permission set was added to the Experience Cloud site, but the async process hasn't completed yet. After the process is complete, the status is updated to `Added`. • `Waiting for Remove`—Use this status to remove all the members belonging to a profile or permission set and remove a profile or permission set from an Experience Cloud site.
`NetworkId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the Experience Cloud site that this group of members is associated with.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the profile or permission set associated with the Experience Cloud site.

Usage

Use this object to view the profiles or permission sets associated with a particular Experience Cloud site. Profiles and permission sets are added and removed asynchronously, so you can also check the status of a profile or permission set that was updated in a site.

If you have Modify All Data, View All Data, or Create and Set Up Experiences, you can view all profiles or permission sets for any Experience Cloud site in the org, regardless of your membership. If you have Modify All Data or Create and Set Up Experiences, you can also add profiles or permission sets. Users without these permissions can only find profiles and permission sets for Experience Cloud sites that they're members of.

Sample Code

```
// Create a new NetworkMemberGroup with a profile as the ParentId
NetworkMemberGroup nmgInsert = new NetworkMemberGroup();
nmg.setNetworkId("0DBD0000000029o");
nmg.setParentId("00eD0000000z1Ww");
```

```
SaveResult[] results = connection.create(new SObject[] { nmgInsert });

// Update an existing NetworkMemberGroup to be removed from the Network
NetworkMemberGroup nmgUpdate = new NetworkMemberGroup();
nmg.setId("0DLD000000003enOAA");
nmg.setAssignmentStatus("WaitingForRemove");
SaveResult[] results = connection.update(new SObject[] { nmgUpdate });
```

NetworkModeration

Represents a flag on an item in a community. This object is available in API version 30.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

This object is available only when your org has digital experiences enabled.

Fields

Field Name	Details
`EntityId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the post, comment, or file that was flagged.
`ModerationType`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort **Description** Determines the type of flag applied to an item. Values are: • FlagAsInappropriate • FlagAsSpam
`NetworkId`	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description ID of the community in which the item was flagged.
`Visibility`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Nillable, Sort **Description** Determines visibility of a flagged item. Values are: • SelfAndModerators—The user who flagged the item and any moderators can see the flagged item. This is the default value. • ModeratorsOnly—Only moderators can see the flagged item. If ModeratorsOnly is selected, only moderators can set flags using the API.

Usage

Use this object to view the items flagged for moderation within a community. Additionally, users with "Moderate Feeds" and "Modify All Data" can remove flags.

Flags on items are created either when a member manually flags an item in a community (if flagging is enabled for that community), or when a trigger automatically flags an item because the item met the trigger criteria.

NetworkPageOverride

Represents information about custom pages used to override the default pages in Experience Cloud sites. You can create Experience Builder or Visualforce pages and override the default pages in a site. Using custom pages allows you to create a more personalized experience for your users. This object is available in API version 34.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- Only users with the Create and Setup Experiences permission can update this object.
- You can't override the Change Password Page with a page created using Experience Builder. You can only override it with a Visualforce page.

Fields

Field Name	Details
NetworkId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the Experience Cloud site where a custom page is used to override a default page.
OverrideSetting	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of the page used to override a default page in the Experience Cloud site. `OverrideSetting` can take the following values: • `Standard`—The standard page that comes by default with the site. • `Configurable`—The page created when the Configurable Self-Reg registration page type or the Login Discovery login page type is selected. • `Designer`—A custom page created using Experience Builder. • `Visualforce`—A custom page created using Visualforce.
OverrideType	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The name of the default page in the Experience Cloud site that you want to override with a custom page.`OverrideType` can take the following values: • `LoginRequired` • `ChangePassword` • `ForgotPassword` • `SelfReg` • `Home`

NetworkSelfRegistration

Represents the account that self-registering Experience Cloud users are associated with by default. Self-registering users in an Experience Cloud site are required to be associated with an account, which the administrator must specify while setting up self-registration for the site. If an account isn't specified, Salesforce creates person accounts (when enabled) for self-registering users. This object is available in API version 34.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`AccountId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the account that self-registering users in the Experience Cloud site are associated with.
`ApexHandlerId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the Apex handler created by Configurable Self-Reg registration page type.
`ExecuteApexHandlerAsId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the user who is executing the configurable self-registration handler.
`NetworkId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update

Field Name	Details
	Description The ID of `NetworkId` is unique within your org. Note: You can use only one account per Experience Cloud site to assign self-registering users.
`OptionsIncludePassword`	**Type** Boolean **Properties** Create, Filter, Update **Description** Option on Configurable Self-Reg registration page. If true, the Include Password field is selected.
`OptionsShowEmail`	**Type** Boolean **Properties** Create, Filter, Update **Description** Option on Configurable Self-Reg registration page. If true, the Email field appears on the self-registration form.
`OptionsShowFirstName`	**Type** Boolean **Properties** Create, Filter, Update **Description** Option on the Configurable Self-Reg registration page. If true, the First Name field appears on the self-registration form.
`OptionsShowLastName`	**Type** Boolean **Properties** Create, Filter, Update **Description** Option on the Configurable Self-Reg registration page. If true, the Last Name field appears on the self-registration form.
`OptionsShowMobilePhone`	**Type** Boolean

Field Name	Details
	Properties Create, Filter, Update **Description** Option on the Configurable Self-Reg registration page. If true, the Mobile field appears on the self-registration form.
`OptionsShowNickname`	**Type** Boolean **Properties** Create, Filter, Update **Description** Option on the Configurable Self-Reg registration page. If true, the Nickname field appears on the self-registration form.
`OptionsShowUsername`	**Type** Boolean **Properties** Create, Filter, Update **Description** Option on the Configurable Self-Reg registration page. If true, the Username field appears on the self-registration form.
`VerificationMethod`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The type of verification method that a user must supply when registering, which can be: • `SyncEmail`—User must supply an email address to verify identity. • `SMS`—User must supply a phone number to verify identity.

NetworkUserHistoryRecent

Represents an Experience Cloud site user's history of accessed records. This object is available in API version 42.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`,`query()`, `undelete()`

Special Access Rules

Only users with the Modify All Data permission can view and delete these data.

Fields

Field	Details
AccessTimestamp	**Type** datetime **Properties** Create, Filter, Sort **Description** The time at which the record was accessed.
ActionType	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Indicates the action type taken by the user. The possible values are: • Read • Write
DomainName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The domain used to access the record.
FeedCommentId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Feed comment accessed by the user.
FeedItemId	**Type** reference **Properties** Create, Filter, Group,Sort, Update

Field	Details
	Description Feed item accessed by the user.
NetworkId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the Experience Cloud site used to access the record or comment.
NetworkUserId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** User's Experience Cloud site user ID to access the record or comment.
RecordId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The record that was accessed.
RecordKeyPrefix	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Record's ID key prefix.
Url	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The URL from which the user accessed the record.
UserType	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update

Field	Details
	Description The type of user who accessed this record. The possible values include: • Standard • Partner • Customer Portal Manager • Customer Portal User • Guest • High Volume Portal • CSN Only • Self Service

Usage

Use the NetworkUserHistoryRecent object to delete comments, posts, or record access by Experience Cloud site users who would like all such activity to be removed.

Note

Represents a note, which is text associated with a custom object or a standard object, such as a Contact, Contract, or Opportunity.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`Body`	**Type** textarea **Properties** Create, Nillable, Update **Description** Body of the note. Limited to 32 KB.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter

Field	Details
	Description Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`IsPrivate`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** If `true`, only the note owner or a user with the “Modify All Data” permission can view the note or query it via the API. Note that if a user who does not have the “Modify All Data” permission sets this field to `true` on a note that they do not own, then they can no longer query, delete, or update the note. Label is **Private**.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the user who owns the note.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the object associated with the note.
`Title`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Title of the note.

Usage

Use this object to manage notes for an object.

SEE ALSO:

Object Basics

NoteAndAttachment

This read-only object contains all notes and attachments associated with an object.

Supported Calls

`describeSObjects()`

Fields

Field	Details
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`IsNote`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the object contains a note (`true`) or an attachment (`false`).
`IsPrivate`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, only the note owner or a user with the "Modify All Data" permission can view the note or query it via the API. Note that if a regular user who does not have "Modify All Data" permission sets this field to `true` on a note that they do not own, then they can no longer query, delete, or update that note. Label is **Private**.
`OwnerId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user who owns the note and attachment.

Field	Details
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the parent object.
`Title`	**Type** string **Properties** Filter, Nillable, Group, Sort **Description** Title of the note.

Usage

Use this object to list all notes and attachments for an object.

To retrieve notes and attachments, issue a describe call on an object, which returns a query result for each activity since the record was created. You can't directly query this object.

SEE ALSO:

Note

Attachment

NoteTag

Associates a word or short phrase with a Note.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ItemId`	**Type** reference **Properties** Create, Filter

Field Name	Details
	Description ID of the tagged item.
`Name`	**Type** string **Properties** Create, Filter **Description** Name of the tag. If this value does not already exist, a new TagDefinition is created and becomes the parent of this Tag object. Otherwise, a TagDefinition with the same name becomes the parent of this Tag object. Parent relationships are created automatically.
`TagDefinitionId`	**Type** reference **Properties** Filter **Description** ID of the parent TagDefinition object that owns the tag.
`Type`	**Type** picklist **Properties** Create, Filter, Restricted picklist **Description** Defines the visibility of a tag. Valid values: • `Public`—The tag can be viewed and manipulated by all users in an organization. • `Personal`—The tag can be viewed or manipulated only by a user with a matching `OwnerId`.

Usage

NoteTag stores the relationship between its parent TagDefinition and the Note being tagged. Tag objects act as metadata, allowing users to describe and organize their data.

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

OauthCustomScope

Represents a permission defining the protected data that a connected app can access from an external entity when Salesforce is the OAuth authorization provider.

An OAuth custom scope tells an external entity about a connected app's permissions to access protected data. The OAuth custom scope that you create in your Salesforce org corresponds to the same custom scope defined in your external entity, and assigned to the resource.

For example, you define an Order Status custom scope in your external entity that allows access to customer order status data in your order system's API. In Salesforce, you create an OAuth custom scope that you also name Order Status. You assign this custom scope to the connected app requesting access to the order status API. When the external entity receives the connected app's request to access a customer's order status, it validates the connected app's access token and Order Status scope. With a successful validation, the app can access the customer order status information in the order system's API.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

You must have the "Manage Connected Apps" permission to access this object.

Fields

Field Name	Details
`Description`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The description of the permission provided to the connected app by the scope. The custom scope's description must be unique, can only include alphanumeric characters, and can be up to 60 characters long. You can enter a custom label in place of a description. An advantage of using a custom label is that you can maintain reusable text in a single location and translate the text into multiple languages. See Custom Labels. Note: The description formatting requirements that apply to custom scopes also apply to custom labels.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Use when referring to the OAuth custom scope from a program. This label must be unique, and can include only alphanumeric characters and underscores.
`IsPublic`	**Type** boolean

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the object is included in the connected app's OpenID Connect discovery endpoint. For more information, see OpenID Connect Discovery Endpoint.
`Language`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates the default language defined for the developing org.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The master label for the custom scope record. This label must be unique, and can include only alphanumeric characters and underscores.

OauthCustomScopeApp

Represents the name of the connected app to which the custom scope is assigned. This object is available in API version 49.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`OauthCustomScopeId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The name of the connected app to which the custom scope is assigned. If the connected app is part of a package, include the package's namespace prefix with the connected app's

Field	Details
	name. Use the following format: ***<namespace_prefix>__<connected_app>***. Use two underscores (_) between the namespace prefix and connected app's name.

OauthToken

Represents an OAuth access token for connected app authentication. Use this object to create a user interface for token management. This object is available in API version 32.0 and later.

A connected app integrates an application with Salesforce using APIs. Connected apps use standard SAML and OAuth protocols to authenticate, provide single sign-on, and provide tokens for use with Salesforce APIs. In addition to standard OAuth capabilities, connected apps allow Salesforce admins to set various security policies and have explicit control over who can use the corresponding apps. Each time that a user grants access to an application, the application obtains a new access token.

Supported Calls

`describeSObjects()`, `query()`

Special Access Rules

Users with the Customize Application permission see all tokens for all users in the org. Otherwise, you see only your own tokens.

Fields

Field Name	Details
`AccessToken`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The refresh token for authorization.
`AppMenuItemId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The unique ID for the App Picker menu item that's associated with this OAuth token.
`AppName`	**Type** string

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The label for the connected app that's associated with this OAuth token.
`DeleteToken`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A token that can be used at the revoke OAuth token endpoint to remove this token.
`Id`	**Type** ID **Properties** Defaulted on create, Filter, Group, idLookup, Sort **Description** Reserved for future use. Currently, the value is always `null`.
`LastUsedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The most recent date when the OAuth token was used.
`RequestToken`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The authorization code that was used to request the corresponding AccessToken. With this authorization code, you can revoke the corresponding AccessToken by passing the DeleteToken.
`UseCount`	**Type** int **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description How often the token has been used.
`UserId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The owner of the token.

Usage

To delete an AccessToken, send a request to the revoke OAuth token endpoint with the DeleteToken as the parameter. For example, the URL `https://login.salesforce.com/services/oauth2/revoke?token=(the Delete Token)` causes the deletion of the token.

In API version 34.0 and later, this object was enhanced to help manage high instance counts. A `query()` call returns up to 500 rows. A `queryMore()` call returns 500 more, up to 2500 total. No more records are returned after 2500. To make sure that you don't miss any records, issue a `COUNT()` query in a SELECT clause for OauthToken. This query gives you the total number of records. If there are more than 2500 records, divide your query by filtering on fields, like `UserId`, to return subsets of less than 2500 records.

ObjectPermissions

Represents the enabled object permissions for the parent PermissionSet. This object is available in API version 24.0 and later.

To grant a user access to an object, associate an ObjectPermissions record with a PermissionSet that's assigned to a user. ObjectPermissions records are only supported in PermissionSet, not in Profile.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Summer '20 and later, only users with the View Setup and Configuration permission can access this object.

Fields

Field Name	Details
`ParentId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** The `Id` of this object's parent PermissionSet.
`PermissionsCreate`	**Type** boolean **Properties** Create, Filter, Update **Description** If `true`, users assigned to the parent PermissionSet can create records for this object. Requires `PermissionsRead` for the same object to be `true`.
`PermissionsDelete`	**Type** boolean **Properties** Create, Filter, Update **Description** If `true`, users assigned to the parent PermissionSet can delete records for this object. Requires `PermissionsRead` and `PermissionsEdit` for the same object to be `true`.
`PermissionsEdit`	**Type** boolean **Properties** Create, Filter, Update **Description** If `true`, users assigned to the parent PermissionSet can edit records for this object. Requires `PermissionsRead` for the same object to be `true`.
`PermissionsModifyAllRecords`	**Type** boolean **Properties** Create, Filter, Update **Description** If `true`, users assigned to the parent PermissionSet can edit all records for this object, regardless of sharing settings. Requires `PermissionsRead`, `PermissionsDelete`, `PermissionsEdit`, and `PermissionsViewAllRecords` for the same object to be `true`.
`PermissionsRead`	**Type** boolean

Field Name	Details
	Properties Create, Filter, Update **Description** If `true`, users assigned to the parent PermissionSet can view records for this object.
`PermissionsViewAllRecords`	**Type** boolean **Properties** Create, Filter, Update **Description** If `true`, users assigned to the parent PermissionSet can view all records for this object, regardless of sharing settings. Requires `PermissionsRead` for the same object to be `true`.
`SobjectType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The object's API name. For example, `Merchandise__c`.

Permission Dependencies

Some user permissions have dependencies on object permissions. For example, if a permission set has the "Transfer Leads" permission, it also has "Read" and "Create" on the leads object.

You can query from ObjectPermissions up to the parent PermissionSet object. For example:

```
SELECT Parent.Name, Parent.PermissionsTransferAnyLead, PermissionsRead, PermissionsCreate
FROM ObjectPermissions
WHERE SobjectType = 'Lead'
```

Determining Object Access with "Modify All Data"

When using SOQL to query object permissions, be aware that some object permissions are enabled because a user permission requires them.

The exception to this rule is when "Modify All Data" is enabled. While it enables all object permissions, it doesn't physically store any object permission records in the database. As a result, unlike object permissions that are required by a user permission—such as "View All Data" or "Import Leads"—the query still returns permission sets with "Modify All Data," but the object permission record will contain an invalid ID that begins with "000". This ID indicates that the object has full access due to "Modify All Data" and the object permission record can't be updated or deleted. To remove full access from these objects, disable "Modify All Data" and then delete the resulting object permission record. This ensures that when using SOQL to find all the objects that have full access, it returns all objects that have this access regardless of whether it's due to "Modify All Data" or because an administrator set full access.

For example, the following will return all permission sets that have "Read" on the Merchandise__c object, regardless of whether it's explicitly defined on the object or implicitly defined through "Modify All Data."

```
SELECT Id, Parent.label, SobjectType, PermissionsRead,
   Parent.PermissionsModifyAllData, ParentId
FROM ObjectPermissions
WHERE PermissionsRead = true and SobjectType = 'Merchandise__c'
```

Nesting Object Permissions

You can nest ObjectPermissions in a PermissionSet query. For example, the following returns any permission sets where "Transfer Leads" is true. Additionally, the result set will include the "Read" object permission on leads. This is done by nesting the SOQL with an object permission query using the relationship name for object permissions: `ObjectPerms`.

```
SELECT Id,Name,PermissionsTransferAnyLead,
(SELECT Id, PermissionsRead from ObjectPerms where SobjectType='Lead')
FROM PermissionSet
WHERE PermissionsTransferAnyLead = true
```

As a result, it's possible to traverse the relationship between the PermissionSet and any child-related objects (in this case, ObjectPermissions). You can do this from the PermissionSet object by using the child relationship (`ObjectPerms`, `FieldPerms`, and so on) or from the child object by referencing the PermissionSet with `Parent.`***`permission_set_attribute`***.

It's important to consider when to use a conditional `WHERE` statement to restrict the result set. To query based on an attribute on the permission set object, nest the SOQL with the child relationship. However, to query based on an attribute on the child object, you must reference the permission set parent attribute in your query.

The following two queries return the same columns with different results, based on whether you use the child relationship or parent notation.

```
SELECT Id, Name, PermissionsModifyAllData,
(SELECT Id, SobjectType, PermissionsRead from Objectperms)
FROM PermissionSet
WHERE PermissionsModifyAllData=true
```

versus:

```
SELECT Id, SObjectType, PermissionsRead, Parent.Id, Parent.Name,
Parent.PermissionsModifyAllData
FROM ObjectPermissions
WHERE SObjectType='Merchandise__c'
```

SEE ALSO:

PermissionSet

FieldPermissions

ObjectTerritory2AssignmentRule

Represents a territory assignment rule that's associated with an object, such as Account. ObjectTerritory2AssignmentRuleItem can only be created or deleted if the BooleanFilter field on its corresponding ObjectTerritory2AssignmentRule is `null`. Available only if Enterprise Territory Management has been enabled for your organization.

Supported Calls

create(), delete(), describeLayout(), describeSObjects(), query(), retrieve(), update(), upsert()

Special Access Rules

As of Summer '20 and later, only standard users can access this object. If a territory model is in Active state, any standard user can view that model, including its territories, assignment rules, assigned records, and assigned users. Users cannot view territory models in other states (such as Planning or Archived).

Fields

Field Name	Details
BooleanFilter	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Represents advanced filter conditions that were specified for the rule in the online application. For example, "(1 AND 2) OR 3."
DeveloperName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. The unique name of the object in the API. This name can contain only underscores and alphanumeric characters and must be unique in your organization. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. The field label in the user interface is Unique Name. Note: When creating large sets of data, always specify a unique DeveloperName for each record. If no DeveloperName is specified, performance may slow while Salesforce generates one for each record.
IsActive	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the rule is active (true) or inactive (false). Via the API, active rules run automatically when object records are created and edited. The exception

Field Name	Details
	is when the value of the IsExcludedFromRealign field on an object record is `true`, which prevents record assignment rules from evaluating that record.
`Language`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the master label in the user interface.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. The user interface label for the territory type.
`ObjectType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The object that the rule is defined for. For API version 31, Account only.
`Territory2ModelId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the territory model.

ObjectTerritory2AssignmentRuleItem

A single row of selection criteria for an ObjectTerritory2AssignmentRule object. ObjectTerritory2AssignmentRuleItem can only be created or deleted if the `BooleanFilter` field on its corresponding ObjectTerritory2AssignmentRule object is a `null` value. Available only if Enterprise Territory Management has been enabled for your organization.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Summer '20 and later, only standard users can access this object. If a territory model is in `Active` state, any standard user can view that model, including its territories and assignment rules. For territories in an active model, any standard user can view assigned records and assigned users subject to your organization's sharing settings. Users cannot view territory models in other states (such as `Planning` or `Archived`).

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The standard or custom object field that the rule item will operate on.
`Operation`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The criterion to apply for the rule item. For example: *`equals`* or *`starts with`*.
`RuleId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the associated ObjectTerritory2AssignmentRule.
`SortOrder`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The order in which this row is evaluated in relation to other ObjectTerritoryAssignmentRuleItem objects for the given ObjectTerritoryAssignmentRule. This field is required for assignment rule items, which are used in the Boolean conditions in assignment rule formulas.

Field Name	Details
Value	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** The field value or values to evaluate. For example: if the field is Billing ZIP/Postal Code, a value might be 94105..

ObjectTerritory2Association

Represents an association (by assignment) between a territory and an object record, such as an account. Available only if Enterprise Territory Management has been enabled for your Salesforce org.

Supported Calls

create(), delete(), describeSObjects(), query(), retrieve()

Special Access Rules

As of Summer '20 and later, only standard and partner users can access this object. If a territory model is in Active state, any standard or partner user can view that model, including its territories and assignment rules. For territories in an active model, any standard or partner user can view assigned records and assigned users subject to your org's sharing settings. Users cannot view territory models in other states (such as Planning or Archived).

Fields

Field Name	Details
AssociationCause	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The means by which the record was associated with the territory: by rules or manually. User interface field label is Method. Manual cause can be set only by a user or via the API. Rules cause is used by the rules engine when the object is assigned.
ObjectId	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** The ID of the object. For API version 30.0 and later, Account only.
SobjectType	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of the record. For API version 30.0 and later, Account only.
Territory2Id	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the territory that the record is assigned to.

OmniDataTransform

For internal use only.

OmniDataTransformItem

For internal use only.

OmniInteractionConfig

For internal use only.

OmniProcess

For internal use only.

OmniProcessCompilation

For internal use only.

OmniProcessElement

For internal use only.

OmniScriptSavedSession

For internal use only.

OmniUiCard

For internal use only.

OpenActivity

This read-only object is displayed in a related list of open activities—future events and open tasks—related to an object. It includes activities for all contacts related to the object. OpenActivity fields for phone calls are only available if your organization uses Salesforce CRM Call Center.

Supported Calls

`describeSObjects()`

Fields

Field	Details
`AccountId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the related account, which is determined as follows: • The account associated with the `WhatId`, if it exists; or • The account associated with the `WhoId`, if it exists; otherwise • `null` For information on IDs, see ID Field Type.
`ActivityDate`	**Type** date **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description Indicates one of the following: • The due date of a task • The date of an event if `IsAllDayEvent` is set to `true` This field has a time stamp that is always set to midnight in the Universal Time Coordinated (UTC) time zone. The time stamp doesn't represent the time of the activity; don't attempt to alter it to accommodate time zone differences. Label is `Date`.
`ActivityDateTime`	**Type** dateTime **Properties** Aggregate, Filter, Nillable, Sort **Description** Contains the event's due date if the `IsAllDayEvent` flag is set to `false`. The time portion of this field is always transferred in the Coordinated Universal Time (UTC) time zone. Translate the time portion to or from a local time zone for the user or the application, as appropriate. Label is **Due Date Time**. The value for this field and `StartDateTime` must match, or one of them must be `null`.
`ActivitySubtype`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Provides standard subtypes to facilitate creating and searching for specific activity subtypes. This field isn't updateable. `ActivitySubtype` values: • Task • Email • Call • Event • List Email
`ActivityType`	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** Represents one of the following values: `Call`, `Email`, `Meeting`, or `Other`. Label is `Type`. These are default values, and can be changed.

Field	Details
	ActivityType is the union of TaskType and EventType. If the same activity appears in both dynamic picklists, duplicate activities appear. TaskType and EventType can each have a Call type. Internally, they are distinct from each other.
AlternateDetailId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of a record the activity is related to which contains more details about the activity. For example, an activity can be related to an EmailMessage record.
CallDisposition	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Represents the result of a given call, for example, "we'll call back," or "call unsuccessful." Limit is 255 characters.
CallDurationInSeconds	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Duration of the call in seconds.
CallObject	**Type** string **Properties** Filter, Group,Nillable, Sort **Description** Name of a call center. Limit is 255 characters.
CallType	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of call being answered: Inbound, Internal, or Outbound.

Field	Details
ConnectionReceivedId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the PartnerNetworkConnection that shared this record with your organization. This field is available only if your organization has enabled Salesforce to Salesforce and only in API versions 28.0 and later.
ConnectionSentId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the PartnerNetworkConnection that your organization shared this record with. This field is available only if your organization has enabled Salesforce to Salesforce, and only in API versions 28.0 and later. The value is always `null`. You can use the PartnerNetworkRecordConnection object to forward records to connections.
Description	**Type** textarea **Properties** Nillable **Description** Contains a description of the event or task. Limit is 32 KB.
DurationInMinutes	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Indicates the duration of the event or task.
EndDateTime	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates the end date and time of the event or task. Available in versions 27.0 and later. This field is optional, depending on the following:

Field	Details
	• If `IsAllDayEvent` is true, you can supply a value for either `DurationInMinutes` or `EndDateTime`. Supplying values in both fields is allowed if the values add up to the same amount of time. If both fields are `null`, the duration defaults to one day. • If `IsAllDayEvent` is false, a value must be supplied for either `DurationInMinutes` or `EndDateTime`. Supplying values in both fields is allowed if the values add up to the same amount of time.
`IsAllDayEvent`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If the value of this field is set to `true`, then the activity is an event spanning a full day, and the `ActivityDate` defines the date of the event. If the value of this field is set to `false`, then the activity may be an event spanning less than a full day, or it may be a task. Label is `All-Day Event`.
`IsClosed`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a task is closed; value is always `false`). This field is set indirectly by setting `Status` on the task—each picklist value has a corresponding `IsClosed` value. Label is `Closed`.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the activity has been moved to the Recycle Bin (`true`) or not (`false`). Label is `Deleted`.
`IsHighPriority`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates a high-priority task. This field is derived from the `Priority` field.
`IsReminderSet`	**Type** boolean

Field	Details
	Properties Defaulted on create, Filter, Group, Sort **Description** Indicates whether a reminder is set for an activity (`true`) or not (`false`).
`IsTask`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If the value of this field is set to `true`, then the activity is a task; if the value is set to `false`, then the activity is an event. Label is `Task`.
`IsVisibleInSelfService`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If the value of this field is set to `true`, then the activity can be viewed in the self-service portal. Label is `Visible in Self-Service`.
`Location`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** If the activity is an event, then this field represents the location of the event. If the activity is a task, then the value is `null`.
`OwnerId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the user or group who owns the activity.
`PrimaryAccountId`	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description Contains the `AccountId` value from the activity record. Available in API versions 30.0 and later to organizations that use Shared Activities.
`PrimaryWhoId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Contains the `WhoId` value from the activity record. Available in API versions 30.0 and later to organizations that have enabled Shared Activities.
`Priority`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** Indicates the priority of a task, such as high, normal, or low.
`ReminderDateTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Represents the time at which a reminder is scheduled to fire if `IsReminderSet` is set to `true`. If `IsReminderSet` is set to `false`, then either the user has deselected the reminder checkbox in the user interface or the reminder has already fired at the time indicated by the value.
`Status`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** Indicates the current status of a task, such as in progress or complete. Each predefined status field sets a value for `IsClosed`. To obtain picklist values, query TaskStatus.
`Subject`	**Type** combobox **Properties** Filter, Nillable, Sort

Field	Details
	Description Contains the subject of the task or event.
`WhatId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The `WhatId` represents nonhuman objects such as accounts, opportunities, campaigns, cases, or custom objects. `WhatIds` are polymorphic. Polymorphic means a `WhatId` is equivalent to the ID of a related object. The label is `Related To ID`.
`WhoId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The WhoId represents a human such as a lead or a contact. WhoIds are polymorphic. Polymorphic means a WhoId is equivalent to a contact's ID or a lead's ID. The label is `Name ID`. If Shared Activities is enabled, the value of this field is the ID of the related lead or primary contact. If you add, update, or remove the WhoId field, you might encounter problems with triggers, workflows, and data validation rules that are associated with the record. The label is `Name ID`.

Usage

Query activities that are related to an object

1. Optionally, issue a describe call against the object whose activities you want to query, to get a suggestion of the correct SOQL query to use.
2. Issue a SOQL relationship query with a main clause that references the object and an inner clause that references the activity history. For example:

```
SELECT
   (SELECT ActivityDate, Description
    FROM OpenActivities)
FROM Account
WHERE Name Like 'XYZ%'
```

The user interface enforces sharing rules, filtering out related-list items that a user doesn't have permission to see.

The following constraints on users who don't have the "View All Data" permission help prevent performance issues.

- In the main clause of the relationship query, you can reference only one record. For example, you can't filter on all records where the account name starts with "A." Instead, you must reference a single account record.

```
SELECT
    (SELECT ActivityDate, Description
     FROM OpenActivities
     ORDER BY ActivityDate ASC NULLS LAST, LastModifiedDate DESC
     LIMIT 500)
FROM Account
WHERE Name = 'Acme'
LIMIT 1
```

- In the inner clause of the query, you can't use `WHERE`.
- In the inner clause of the query, you must specify a limit of 500 or fewer on the number of rows that are returned in the list.
- In the inner clause of the query, you must sort on `ActivityDate` in ascending order and `LastModifiedDate` in descending order. You can optionally display nulls last. For example: `ORDER BY ActivityDate ASC NULLS LAST, LastModifiedDate DESC`.

SEE ALSO:
Task

OperatingHours

Represents the hours in which a service territory, service resource, or account is available for field service work in Field Service and Lightning Scheduler. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** The description of the operating hours. Add any details that aren't included in the name.
`LastReferencedDate`	**Type** dateTime

Field Name	Details
	Properties Filter, Nillable, Sort **Description** The date when the operating hours record was last modified. Its label in the user interface is `Last Modified Date`.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the operating hours record was last viewed.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the operating hours. For example, *`Summer Hours`*, *`Winter Hours`*, or *`Peak Season Hours`*.
`TimeZone`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The time zone which the operating hours fall within.

Usage

By default, only System Administrators can view, create, and assign operating hours.

Service territory members—which are service resources who can work in the territory—automatically use their service territory's operating hours. If a resource needs different operating hours than their territory, create separate operating hours for them from the Operating Hours tab. Then, select the desired hours in the `Operating Hours` lookup field on the service territory member detail page.

To view a service resource's operating hours for a particular territory, navigate to their Service Territories related list and click the Member Number for the territory. This takes you to the service territory member detail page, which lists the member's operating hours and dates during which they belong to the territory.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

OperatingHoursFeed
: Feed tracking is available for the object.

OperatingHoursHistory

Represents the history of changes made to tracked fields on an operating hours record. This object is available in API version 38.0 and later.

Supported Calls

`getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Special Access Rules

Field Service must be enabled in your organization, and field tracking for operating hours fields must be configured.

Fields

Field Name	Details
`DataType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Data type of the field that was changed.
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.

Field Name	Details
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The value of the field before it was changed.
`TimeSlotId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the operating hours record being tracked. The history is displayed on the detail page for this record.

Opportunity

Represents an opportunity, which is a sale or pending deal.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Field Type
`AccountId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the account associated with this opportunity.
`Amount`	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update

Field	Field Type
	Description Estimated total sale amount. For opportunities with products, the amount is the sum of the related products. Any attempt to update this field, if the record has products, will be ignored. The update call will not be rejected, and other fields will be updated as specified, but the Amount will be unchanged.
`CampaignId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of a related Campaign. This field is defined only for those organizations that have the campaign feature Campaigns enabled. The User must have read access rights to the cross-referenced Campaign object in order to create or update that campaign into this field on the opportunity.
`CloseDate`	**Type** date **Properties** Create, Filter, Group, Sort, Update **Description** Required. Date when the opportunity is expected to close.
`ConnectionReceivedId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the PartnerNetworkConnection that shared this record with your organization. This field is available if you enabled Salesforce to Salesforce.
`ConnectionSentId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the PartnerNetworkConnection that you shared this record with. This field is available if you enabled Salesforce to Salesforce. This field is supported using API versions earlier than 15.0. In all other API versions, this field's value is null. You can use the new PartnerNetworkRecordConnection object to forward records to connections.
`ContactId`	**Type** reference

Field	Field Type
	Properties Create, Filter, Group, Nillable, Sort **Description** ID of the contact associated with this opportunity, set as the primary contact. Read-only field that is derived from the opportunity contact role, which is created at the same time the opportunity is created. This field can only be populated when it's created, and can't be updated. To update the value in this field, change the `IsPrimary` flag on the OpportunityContactRole associated with this opportunity. Available in API version 46.0 and later.
`ContractId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the contract that's associated with this opportunity.
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization. If the organization has multicurrency and a Pricebook2 is specified on the opportunity (i.e., the `Pricebook2Id` field is not blank), then the currency value of this field must match the currency of the PricebookEntry records that are associated with any opportunity line items it has.
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** Text description of the opportunity. Limit: 32,000 characters.
`ExpectedRevenue`	**Type** currency **Properties** Filter, Nillable, Sort

Field	Field Type
	Description Read-only field that is equal to the product of the opportunity `Amount` field and the `Probability`. You can't directly set this field, but you can indirectly set it by setting the `Amount` or `Probability` fields.
`Fiscal`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** If fiscal years are not enabled, the name of the fiscal quarter or period in which the opportunity `CloseDate` falls. Value should be in YYY Q format, for example, '2006 1' for first quarter of 2006.
`FiscalQuarter`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Represents the fiscal quarter. Valid values are 1, 2, 3, or 4.
`FiscalYear`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Represents the fiscal year, for example, 2006.
`ForecastCategory`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Restricted picklist field. It is implied, but not directly controlled, by the `StageName` field. You can override this field to a different value than is implied by the `StageName` value. The values of this field are fixed enumerated values. The field labels are localized to the language of the user performing the operation, if localized versions of those labels are available for that language in the user interface. In API version 12.0 and later, the value of this field is automatically set based on the value of the `ForecastCategoryName` and can't be updated any other way. The field properties Create, Defaulted on create, Nillable, and Update are not available in version 12.0.

Field	Field Type
ForecastCategoryName	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available in API version 12.0 and later. The name of the forecast category. It is implied, but not directly controlled, by the `StageName` field. You can override this field to a different value than is implied by the `StageName` value.
HasOpenActivity	**Type** boolean **Properties** Defaulted on create, Group, **Description** Indicates whether an opportunity has an open event or task (`true`) or not (`false`). Available in API version 35.0 and later.
HasOpportunityLineItem	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Read-only field that indicates whether the opportunity has associated line items. A value of `true` means that Opportunity line items have been created for the opportunity. An opportunity can have opportunity line items only if the opportunity has a price book. The opportunity line items must correspond to PricebookEntry objects that are listed in the opportunity Pricebook2. However, you can insert opportunity line items on an opportunity that does not have an associated Pricebook2. For the first opportunity line item that you insert on an opportunity without a Pricebook2, the API automatically sets the `Pricebook2Id` field, if the opportunity line item corresponds to a PricebookEntry in an active Pricebook2 that has a `CurrencyIsoCode` field that matches the `CurrencyIsoCode` field of the opportunity. If the Pricebook2 is not active or the `CurrencyIsoCode` fields do not match, then the API returns an error. You can't update the `Pricebook2Id` or `PricebookId` fields if opportunity line items exist on the Opportunity. You must delete the line items before attempting to update the `PricebookId` field.
HasOverdueTask	**Type** boolean **Properties** Defaulted on create, Group,

Field	Field Type
	Description Indicates whether an opportunity has an overdue task (`true`) or not (`false`). Available in API version 35.0 and later.
`IqScore`	**Type** int **Properties** Aggregate, Filter, Group, Nillable, Sort **Description** The likelihood, measured on a scale of 1 to 99, that an opportunity will be won. Einstein Opportunity Scoring must be enabled. Available in API version 41.0 and later. Label is **Opportunity Score**.
`IsClosed`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Directly controlled by `StageName`. You can query and filter on this field, but you can't directly set it in a create, upsert, or update request. It can only be set via `StageName`. Label is **Closed**.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`IsExcludedFromTerritory2Filter`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Used for Filter-Based Opportunity Territory Assignment (Pilot in Spring '15 / API version 33). Indicates whether the opportunity is excluded (*`True`*) or included (*`False`*) each time the APEX filter is executed.
`IsSplit`	**Type** boolean

Field	Field Type
	Properties Defaulted on create, Filter, Group, Sort **Description** Read-only field that indicates whether credit for the opportunity is split between opportunity team members. Label is `IsSplit`. This field is available in versions 14.0 and later for organizations that enabled Opportunity Splits during the pilot period. Warning: This field should not be used. However, it's documented for the benefit of pilot customers who find references to `IsSplit` in code.
`IsWon`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Directly controlled by `StageName`. You can query and filter on this field, but you can't directly set the value. It can only be set via `StageName`. Label is **Won**.
`LastActivityDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Value is one of the following, whichever is the most recent: • Due date of the most recent event logged against the record. • Due date of the most recently closed task associated with the record.
`LastAmountChangedHistoryId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the OpportunityHistory record that contains information about when the opportunity Amount field was last updated in Winter '21 or later. Information includes the date and time of the change and the user who made the change. Available in API version 50.0 and later.
`LastCloseDateChangedHistoryId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the OpportunityHistory record that contains information about when the opportunity Close Date field was last updated in Winter '21 or later. Information includes the date and

Field	Field Type
	time of the change and the user who made the change. Available in API version 50.0 and later.
LastReferencedDate	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
LastViewedDate	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (LastReferencedDate) but not viewed it.
LeadSource	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Source of this opportunity, such as Advertisement or Trade Show.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. A name for this opportunity. Limit: 120 characters.
NextStep	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of next task in closing opportunity. Limit: 255 characters.

Field	Field Type
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the User who has been assigned to work this opportunity. If you update this field, the previous owner's access becomes Read Only or the access specified in your organization-wide default for opportunities, whichever is greater. If you have set up opportunity teams in your organization, updating this field has different consequences depending on your version of the API: • For API version 12.0 and later, sharing records are kept, as they are for all objects. • For API version before 12.0, sharing records are deleted. • For API version 16.0 and later, users must have the “Transfer Record” permission in order to update (transfer) account ownership using this field.
Pricebook2Id	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** ID of a related Pricebook2 object. The `Pricebook2Id` field indicates which Pricebook2 applies to this opportunity. The `Pricebook2Id` field is defined only for those organizations that have products enabled as a feature. You can specify values for only one field (`Pricebook2Id` or `PricebookId`)—not both fields. For this reason, both fields are declared nillable.
PricebookId	**Type** reference **Properties** Create, Defaulted on create, Filter, Nillable, Update **Description** Unavailable as of version 3.0. As of version 8.0, the Pricebook object is no longer available. Use the `Pricebook2Id` field instead, specifying the ID of the Pricebook2 record.
Probability	**Type** percent **Properties** Create, Defaulted on create, Filter, Nillable, Sort, Update **Description** Percentage of estimated confidence in closing the opportunity. It is implied, but not directly controlled, by the `StageName` field. You can override this field to a different value than what is implied by the `StageName`.

Field	Field Type
	Note: If you're changing the `Probability` field through the API using a partner WSDL call, or an Apex `before` trigger, and the value may have several decimal places, we recommend rounding the value to a whole number. For example, the following Apex in a `before` trigger uses the `round` method to change the field value: `o.probability = o.probability.round();`
`RecordTypeId`	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the record type assigned to this object.
`StageName`	**Type** picklist **Properties** Create, Filter, Group, Sort, Update **Description** Required. Current stage of this record. The `StageName` field controls several other fields on an opportunity. Each of the fields can be directly set or implied by changing the `StageName` field. In addition, the `StageName` field is a picklist, so it has additional members in the returned describeSObjectResult to indicate how it affects the other fields. To obtain the stage name values in the picklist, query the OpportunityStage object. If the `StageName` is updated, then the `ForecastCategoryName`, `IsClosed`, `IsWon`, and `Probability` are automatically updated based on the stage-category mapping.
`SyncedQuoteID`	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** Read only in an Apex trigger. The ID of the Quote that syncs with the opportunity. Setting this field lets you start and stop syncing between the opportunity and a quote. The ID has to be for a quote that is a child of the opportunity.
`Territory2Id`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the territory that is assigned to the opportunity. Available only if Enterprise Territory Management has been enabled for your organization.

Field	Field Type
	Note: Users who have full access to an opportunity's account can assign any territory from the active model to the opportunity. Users who do *not* can assign only a territory that is also assigned to the opportunity's account. The same restriction applies to territory assignments made via Apex in system mode.
`TotalOpportunityQuantity`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Number of items included in this opportunity. Used in quantity-based forecasting.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Type of opportunity. For example, Existing Business or New Business. Label is **Opportunity Type**.

Note: If you are importing Opportunity data and need to set the value for an audit field, such as `CreatedDate`, contact Salesforce. Audit fields are automatically updated during API operations unless you request to set these fields yourself..

Usage

Use the Opportunity object to manage information about a sale or pending deal. You can also sync this object with a child Quote. To update an Opportunity, your client application needs "Edit" permission on opportunities. You can create, update, delete, and query Attachment records associated with an opportunity via the API. To split credit for an opportunity among multiple opportunity team members, use the OpportunitySplit object.

Client applications can also create or update opportunity objects by converting a Lead with `convertLead()`.

Note: On opportunities and opportunity products, the workflow rules, validation rules, and Apex triggers fire when an update to a child opportunity product or schedule causes an update to the parent record. This means your custom application logic is enforced when there are updates to the parent record, ensuring higher data quality and compliance with your organization's business policies.

Sample Code—Java

This code starts the sync between an object and a child quote.

```
public void startQuoteSync() {
         Opportunity opp = new Opportunity();
         opp.setId(new ID("006D000000CpOSy"));
         opp.setSyncedQuoteId(new ID("0Q0D000000002OZ"));
```

```
   // Invoke the update call and save the results
   try {
      SaveResult[] saveResults = binding.update(new SObject[] {opp});
      // check results and do more processing after the update call ...
   }
   catch (Exception ex) {
      System.out.println("An unexpected error has occurred." + ex.getMessage());
      return;
 }
}
```

This code stops the sync between an object and a child quote.

```
public void stopQuoteSync() {
         Opportunity opp = new Opportunity();
         opp.setId(new ID("006D000000CpOSy"));
         opp.setFieldsToNull(new String[]  {"SyncedQuoteId"} );
   // Invoke the update call and save the results
   try {
      SaveResult[] saveResults = binding.update(new SObject[] {opp});
      // check results and do more processing after the update call ...
   }
   catch (Exception ex) {
      System.out.println("An unexpected error has occurred." + ex.getMessage());
      return;
 }
}
```

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

OpportunityFeed (API version 18.0)
Feed tracking is available for the object.

OpportunityHistory
History is available for tracked fields of the object.

OpportunityOwnerSharingRule
Sharing rules are available for the object.

OpportunityShare
Sharing is available for the object.

Additional Considerations

If you are using `before` triggers to set `Stage` and `Forecast Category` for an opportunity record, the behavior is as follows:

- If you set `Stage` and `Forecast Category`, the opportunity record contains those exact values.
- If you set `Stage` but not `Forecast Category`, the `Forecast Category` value on the opportunity record defaults to the one associated with trigger `Stage`.
- If you reset `Stage` to a value specified in an API call or incoming from the user interface, the `Forecast Category` value should also come from the API call or user interface. If no value for `Forecast Category` is specified and the incoming `Stage`

is different than the trigger `Stage`, the `Forecast Category` defaults to the one associated with trigger `Stage`. If the trigger `Stage` and incoming `Stage` are the same, the `Forecast Category` is not defaulted.

If you are cloning an opportunity with products, the following events occur in order:

1. The parent opportunity is saved according to the order of execution.
2. The opportunity products are saved according to the order of execution.

Note: If errors occur on an opportunity product, you must return to the opportunity and fix the errors before cloning.

If any opportunity products contain unique custom fields, you must null them out before cloning the opportunity.

SEE ALSO:

OpportunityCompetitor

OpportunityHistory

OpportunityLineItem

OpportunityLineItemSchedule

OpportunityFieldHistory

Quote

QuoteLineItem

PartnerNetworkConnection

OpportunityCompetitor

Represents a competitor on an Opportunity.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
CompetitorName	**Type** combobox **Properties** Create, Filter, Nillable, Sort, Update **Description** Name of the competitor.
IsDeleted	**Type** boolean

Field	Details
	Properties Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`OpportunityId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the associated Opportunity.
`Strengths`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the competitor's strengths. Limit: 1,000 characters.
`Weaknesses`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the competitor's weaknesses. Limit: 1,000 characters.

Usage

Use this object to manage competitors on an Opportunity, associating multiple competitors on a opportunity and specifying the strengths and weaknesses of each competitor.

SEE ALSO:

Opportunity

OpportunityContactRole

Represents the role that a Contact plays on an Opportunity.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`ContactId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of an associated Contact. The API applies user access rights to the associated Opportunity for this object, but not to the associated Contact. The API may return rows from a query on this object that include this field's values for contacts to which the user does not have sufficient access rights. It may also return values for this field for contacts that have been deleted. In either case, the client must perform a query on the contact table for this field's value to determine whether the Contact is accessible to the user and has not been deleted.
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only for orgs with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the org. This field is available in API version 47.0.
`Division`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** A logical segment of your organization's data. For example, if your company is organized into different business units, you could create a division for each business unit, such as "North America," "Healthcare," or "Consulting." Available only if the organization has the Division permission enabled.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter

Field	Details
	Description Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`). The `IsDeleted` flag is usable only when the parent record is deleted to the recycle bin, and not when the `OpportunityContactRole` record is deleted directly. Label is **Deleted**.
`IsPrimary`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the associated Contact plays the primary role on the Opportunity (`true`) or not (`false`). Each Opportunity has only one primary contact. Label is **Primary**.
`OpportunityId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of an associated Opportunity. This field is non-nullable, and it cannot be updated. You must provide a value for this field when creating new records. You can't change it after it has been created.
`Role`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Name of the role played by the associated Contact on the Opportunity, such as Business User or Decision Maker.

Usage

Use the Opportunity Contact Role object to manage information about contacts and roles related to opportunities. Records of this type appear in the user interface in the Opportunity Contact Role related list and on the Opportunity detail page.

Although allowed, we do not recommend that you create multiple relationships between the same Opportunity and a Contact.

SEE ALSO:

Object Basics

OpportunityContactRoleSuggestionInsight

Represents a suggestion for a new opportunity contact role. Available in API versions 45.0 and later.

Supported Calls

`describeLayout()`, `describeSObjects()`, `getDeleted()`, `getDeleted()`, `query()`, `retrieve()`

Special Access Rules

To add or decline opportunity contact role suggestions, users need a Sales Cloud Einstein license, edit access on opportunities, and read or edit access on contacts. As of the Spring '20 release, Pardot and High Velocity Sales users no longer have access to this object.

Fields

Field Name	Details
ContactId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the related contact record.
CreatedRecordId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the created opportunity contact role record.
CurrencyIsoCode	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Available only for orgs with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization.
Division	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort

Field Name	Details
	Description The division of the suggested opportunity contact role.
LastOperationUserId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the user who last performed a related operation.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (LastReferencedDate) but not viewed it.
OpportunityId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the related opportunity.
RationaleLabel	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The reason why this is a suggested opportunity contact role.

Field Name	Details
`Role`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The role of the suggested opportunity contact role.
`Status`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The status of the suggested contact. Possible values include: • New • Pending • Added • Declined

Usage

This object is read-only and isn't supported in workflows, triggers, or process builder.

OpportunityFieldHistory

Represents the history of changes to the values in the fields of an opportunity. This object is available in versions 13.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Fields

Field	Details
`DataType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort

Field	Details
	Description Data type of the field that was changed.
Field	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
OpportunityId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the Opportunity. Label is **Opportunity ID**.
NewValue	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
OldValue	**Type** anyType **Properties** Nillable, Sort **Description** The latest value of the field before it was changed.

Usage

Use this object to identify changes to any fields on an Opportunity. The OpportunityHistory object represents the history of a change to the `Amount`, `Probability`, `Stage`, or `Close Date` fields of an Opportunity.

This object respects field level security on the parent object.

SEE ALSO:

Opportunity

OpportunityHistory

Represents the stage history of an Opportunity.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Fields

Field	Details
`Amount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Estimated total sale amount.
`CloseDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Date when the opportunity is expected to close.
`ExpectedRevenue`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Calculated revenue based on the `Amount` and `Probability` fields.

Field	Details
`ForecastCategory`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Category that determines the column in which an opportunity is totaled in a forecast. Label is **To ForecastCategory**.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`OpportunityId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the associated Opportunity.
`PrevAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** The value in the opportunity's Amount field before the update of the opportunity. Note: In OpportunityHistory records created before Winter '21, the value is null. Available in API version 50.0 and later.
`PrevCloseDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** The value in the opportunity's Close Date field before the update of the opportunity. Note: In OpportunityHistory records created before Winter '21, the value is null. Available in API version 50.0 and later.

Field	Details
`Probability`	**Type** percent **Properties** Filter, Nillable, Sort **Description** Percentage of estimated confidence in closing the opportunity.
`StageName`	**Type** picklist **Properties** Filter, Group, Sort **Description** Name of the current stage of the opportunity (for example, Prospect or Proposal).

Usage

This object represents the history of a change to the `Amount`, `Probability`, `Stage`, or `Close Date` fields of an Opportunity. The OpportunityFieldHistory object represents the history of a change to any of the fields of an Opportunity. To obtain information about how a particular opportunity is progressing, query the OpportunityHistory records associated with a given Opportunity. Please note that if an opportunity's `Amount`, `Probability`, `Stage`, or `Close Date` fields have not changed, nothing will be returned in the OpportunityHistory objects. In this case, query the OpportunityFieldHistory records associated with a given Opportunity to get more information about changes to the opportunity.

This object is read-only. The system generates a new record whenever a user or client application changes the value of any of the above fields; the then-current values of all of these major fields are saved in the newly-generated object.

This object respects field-level security on the parent object.

Note: The record is automatically deleted if its parent Opportunity is deleted.

SEE ALSO:

Opportunity

OpportunityInsight

Represents an individual insight (deal prediction, follow-up reminder, or key moment) related to an opportunity record.

Supported Calls

`describeLayout()`, `describeSObjects()`, `getDeleted()`, `query()`, `retrieve()`

Special Access Rules

To see an insight related to a specific opportunity, users need a Sales Cloud Einstein license and access to the opportunity record. As of the Spring '20 release, Pardot and High Velocity Sales users no longer have access to this object.

Fields

Field Name	Details
`ActualHeardWithinDays`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of days it has been since a prospect has responded for insights of type `Prospect has not responded` and `No communication`.
`CloseDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The close date of the related opportunity for insights of type `Opportunity is overdue` and `Opportunity is unlikely to close in time`.
`CompetitorName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** This field has been deprecated as of API version 45.0.
`ContactName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** This field is not in use as of API version 46.0.
`ContactTitle`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description This field is not in use as of API version 46.0.
`CurrencyIsoCode`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Available only for orgs with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization.
`Division`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The division of the related record.
`ExpectedHeardWithinDays`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The expected number of days it takes to hear back from a prospect for insights of type `Prospect has not responded` and `No communication`.
`LastHeard`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the related prospect was last heard from for insights of type `Prospect has not responded`.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.

Field Name	Details
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (`LastReferencedDate`) but not viewed it.
`OpportunityId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the related opportunity record.
`Rationale`	**Type** string **Properties** Filter, Group, Nillable **Description** The explanation for an insight, providing more background information and details that are specific to the org.
`Reason`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The reason why a specific insight type is appearing. Relevant to the following insights: • Opportunity is unlikely to close in time • Opportunity slowing • Opportunity boosting • Time-consuming opportunity
`TaskDue`	**Type** dateTime **Properties** Filter, Nillable, Sort

Field Name	Details
	Description The date that a task associated with the related opportunity record is due.
Title	**Type** string **Properties** Filter, Group, Nillable **Description** The title of the insight.
TrendType	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The trend type of the insight. Possible values include: • Negative • Positive • Informational
Type	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of insight. Possible values include: • Opportunity is unlikely to close in time • Prospect has not responded • Opportunity slowing • Opportunity boosting • Time-consuming opportunity • No communication • Re-engaged opportunity • Opportunity has an overdue task • Opportunity is overdue • Opportunity has no open activity • Unusual opportunity amount

Usage

This object is read-only and isn't supported in workflows, triggers, or process builder.

OpportunityLineItem

Represents an opportunity line item, which is a member of the list of Product2 products associated with an Opportunity.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

The user must have the "Edit" permission on Opportunity records to create or update opportunity line items on an opportunity.

Fields

Field	Details
`CanUseQuantitySchedule`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the opportunity product can have a quantity schedule (`true`) or not (`false`). This field is read-only.
`CanUseRevenueSchedule`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the opportunity product can have a revenue schedule (`true`) or not (`false`). This field is read-only.
`ConnectionReceivedId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the PartnerNetworkConnection that shared this record with your organization. This field is available if you enabled Salesforce to Salesforce.

Field	Details
ConnectionSentId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the PartnerNetworkConnection that you shared this record with. This field is available if you enabled Salesforce to Salesforce. This field is supported using API versions earlier than 15.0. In all other API versions, this field's value is null. You can use the new PartnerNetworkRecordConnection object to forward records to connections.
CurrencyIsoCode	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization. If the organization has multicurrency enabled, and a Pricebook2 is specified on the parent opportunity (that is, the `Pricebook2Id` field is not blank on the opportunity referenced by this object's `OpportunityId`), then the value of this field must match the currency of the `CurrencyIsoCode` field on the PricebookEntry records that are associated with this object.
Description	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Text description of the opportunity line item. Limit: 80 characters.
Discount	**Type** percent **Properties** Create, Filter, Nillable, Sort, Update **Description** Discount for the product as a percentage. When updating these records: • If you specify `Discount` without specifying `TotalPrice`, the `TotalPrice` is adjusted to accommodate the new `Discount` value, and the `UnitPrice` is held constant.

Field	Details
	• If you specify both `Discount` and `Quantity`, you must also specify either `TotalPrice` or `UnitPrice` so the system knows which one to automatically adjust.
`HasQuantitySchedule`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Read-only. Indicates whether a quantity schedule has been created for this object (`true`) or not (`false`).
`HasRevenueSchedule`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a revenue schedule has been created for this object (`true`) or not (`false`). If this object has a revenue schedule, the `Quantity` and `TotalPrice` fields can't be updated. In addition, the `Quantity` field can't be updated if this object has a quantity schedule. Update requests aren't rejected but the updated values are ignored.
`HasSchedule`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If either `HasQuantitySchedule` or `HasRevenueSchedule` is `true`, this field is also `true`.
`LastReferencedDate`	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record. Available in API version 50.0 and later.
`LastViewedDate`	**Type** datetime

Field	Details
	Properties Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed. Available in API version 50.0 and later.
`ListPrice`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Corresponds to the `UnitPrice` on the PricebookEntry that is associated with this line item, which can be in the standard price book or a custom price book. A client application can use this information to show whether the unit price (or sales price) of the line item differs from the price book entry list price.
`Name`	**Type** string **Properties** Filter, Nillable, Sort **Description** The opportunity line item name (known as "Opportunity Product" in the user interface). This read-only field is available in API version 30.0 and later.
`OpportunityId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the associated Opportunity.
`PricebookEntryId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** Required. ID of the associated PricebookEntry. Exists only for those organizations that have Products enabled as a feature. In API versions 1.0 and 2.0, you can specify values for either this field or `ProductId`, but not both. For this reason, both fields are declared nillable. In API version 3.0 and later, you must specify values for this field instead of `ProductId`.

Field	Details
`ProductId`	**Type** reference **Properties** Create, Filter, Nillable **Description** ID of the related Product record. This field is unavailable as of version 3.0 and is only provided for backward compatibility. The Product object is unavailable beginning with version 8.0. Use the `PricebookEntryId` field instead, specifying the ID of the PricebookEntry record.
`Product2Id`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the related Product2 record. This is a read-only field available in API version 30.0 and later. Use the `PricebookEntryId` field instead, specifying the ID of the PricebookEntry record.
`ProductCode`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** This read-only field is available in API version 30.0 and later. It references the value in the ProductCode field of the related Product2 record.
`Quantity`	**Type** double **Properties** Create, Filter, Sort, Update **Description** Read-only if this record has a quantity schedule, a revenue schedule, or both a quantity and a revenue schedule. When updating these records: • If you specify `Quantity` without specifying the `UnitPrice`, the `UnitPrice` value will be adjusted to accommodate the new `Quantity` value, and the `TotalPrice` will be held constant. • If you specify both `Discount` and Quantity, you must also specify either `TotalPrice` or `UnitPrice` so the system can determine which one to automatically adjust.

Field	Details
RecalculateTotalPrice	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Changes behavior of OpportunityLineItem calculations when a line item has child schedule rows for the `Quantity` value. When enabled, if the rollup quantity changes, then the quantity rollup value is multiplied against the sales price to change the total price. Product2 flag must be set to true.
ServiceDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Date when the product revenue will be recognized and the product quantity will be shipped. • Opportunity Close Date—`ServiceDate` is ignored. • Product Date—`ServiceDate` is used if not `null`. • Schedule Date—`ServiceDate` is used if not `null` and there are no revenue schedules present for this line item, that is, there are no OpportunityLineItemSchedule records with a field `Type` value of Revenue that are children of this record.
SortOrder	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Number indicating the sort order selected by the user. Client applications can use this to match the sort order in Salesforce.
Subtotal	**Type** currency **Properties** Filter, Nillable, Sort **Description** Difference between standard and discounted pricing. Converted currency amounts when the opportunity's currency is different from the user's currency.
TotalPrice	**Type** currency **Properties** Create, Defaulted on create, Filter, Nillable, Sort, Update

Field	Details
	Description This field is available only for backward compatibility. It represents the total price of the OpportunityLineItem. If you do not specify `UnitPrice`, this field is required. If you specify `Discount` and `Quantity`, this field or `UnitPrice` is required. When updating these records, you can change either this value or the `UnitPrice`, but not both at the same time. This field is nillable, but you can't set both `TotalPrice` and `UnitPrice` to null in the same update request. To insert the `TotalPrice` via the API (given only a unit price and the quantity), calculate this field as the unit price multiplied by the quantity. This field is read-only if the opportunity line item has a revenue schedule. If the opportunity line item does not have a schedule or only has quantity schedule, this field can be updated.
`UnitPrice`	**Type** currency **Properties** Create, Defaulted on create, Filter, Nillable, Sort, Update **Description** The unit price for the opportunity line item. In the Salesforce user interface, this field's value is calculated by dividing the total price of the opportunity line item by the quantity listed for that line item. Label is **Sales Price**. This field or `TotalPrice` is required. You can't specify both. If you specify `Discount` and `Quantity`, this field or `TotalPrice` is required.

Usage

An Opportunity can have associated OpportunityLineItem records only if the Opportunity has a Pricebook2. An OpportunityLineItem must correspond to a Product2 that is listed in the opportunity's Pricebook2. For information about inserting OpportunityLineItem for an opportunity that does not have an associated Pricebook2 or any existing line items, see Effects on Opportunities.

This object is defined only for orgs with products enabled as a feature. If the products feature isn't enabled, this object doesn't appear in the `describeGlobal()` call, and you can't use `describeSObjects()` or query the OpportunityLineItem object.

For a visual diagram of the relationships between OpportunityLineItem and other objects, see Product and Schedule Objects.

Note:

- If the multicurrency option is enabled, the `CurrencyIsoCode` field is present. It can't be modified, and is always set to the value of the `CurrencyIsoCode` of the parent Opportunity.
- If customizable product schedules are enabled, you can use custom fields in default schedules and customize their layout. But if you've applied validation rules or Apex triggers, they're bypassed when they're first inserted.

Effects on Opportunities

Opportunities with associated OpportunityLineItem records are affected in the following ways:

- Creating an OpportunityLineItem increments the Opportunity `Amount` value by the `TotalPrice` of the OpportunityLineItem. Additionally, inserting an OpportunityLineItem increments the `ExpectedRevenue` on the opportunity by the `TotalPrice` times the opportunity `Probability`.
- The Opportunity `Amount` becomes a read-only field when the opportunity has line items. The API ignores any attempt to update this field on an opportunity with line items. Update requests are not rejected, but the updated value is ignored.
- You can't update the `PricebookId` field or the `CurrencyIsoCode` field on the opportunity if line items exist. The API rejects any attempt to update these fields on an opportunity with line items.
- When you create or update an OpportunityLineItem, the API verifies that the line item corresponds to a PricebookEntry in the Pricebook2 that is associated with the opportunity. If the opportunity does not have an associated Pricebook2, the API automatically sets the price book on the opportunity if the line item corresponds to a PricebookEntry in an active Pricebook2, and if the PricebookEntry has a `CurrencyIsoCode` field that matches the `CurrencyIsoCode` field of the opportunity. If the Pricebook2 is not active or the `CurrencyIsoCode` fields do not match, an error is returned.
- The Opportunity `HasOpportunityLineItem` field is set to `true` when an OpportunityLineItem is inserted for that Opportunity.

SEE ALSO:

OpportunityLineItemSchedule

OpportunityLineItemSchedule

Represents information about the quantity, revenue distribution, and delivery dates for a particular OpportunityLineItem.

In API version 38.0 and later, when an OpportunityLineItem record is created for a product with a previously established schedule, an OpportunityLineItemSchedule record is also created.

In API version 46.0 and later, this object supports custom fields, validation rules, and Apex triggers. Deleting a schedule now also invokes delete triggers. If customizable product schedules are enabled, you can use custom fields in default schedules and customize their layout. But if you've applied validation rules or Apex triggers, they're bypassed when they're first inserted.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Nillable, Restricted picklist, Update **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization. This field is available in version 10.0 and later.

Field	Details
Description	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Text description of the opportunity line item schedule. Limit: 80 characters. Label is **Comments**.
OpportunityLineItemId	**Type** reference **Properties** Create, Filter **Description** Required. ID of the associated OpportunityLineItem.
Quantity	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Required. The total number of units to be scheduled in a quantity schedule.
Revenue	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** The revenue that should be recognized, or the quantity that should be shipped, or both - depending upon the value of `Type`.
ScheduleDate	**Type** date **Properties** Create, Filter, Group, Sort, Update **Description** Required. The date the associated OpportunityLineItem is to be scheduled for an event: delivery, shipping, or any other date you wish to track.
Type	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort

Field	Details
	Description The type of the schedule. Required when inserting an OpportunityLineItemSchedule. Valid values include `Quantity`, `Revenue`, or `Both`.

Allowed Type Field Values

The allowed `Type` values for an OpportunityLineItemSchedule depend on the product-level schedule preferences and whether the line item has any existing schedules. The following criteria must be met:

- The Product2 on which the OpportunityLineItem is based must have the appropriate `CanUseRevenueSchedule` or `CanUseQuantitySchedule` fields (or both) set to `true`.
- When you create a schedule for a line item that does not have any existing schedules, you can specify any valid value.
- If you create a schedule for a line item that already has existing schedules, the new schedule must be consistent with the existing schedules. The following matrix outlines the allowable values:

Value of HasRevenueSchedule on line item	Value of HasQuantitySchedule on line item	Allowable Type Values
false	false	`Revenue`, `Quantity`, both
false	true	`Quantity`
true	false	`Revenue`
true	true	both

Allowed Quantity and Revenue Field Values

The allowable `Quantity` and `Revenue` field values depend on the value of the `Type` field:

Type Value	Allowable Quantity Value	Allowable Revenue Value
`Revenue`	Null	Non-null
`Quantity`	Non-null	Null
both	Non-null	Non-null

The `Quantity` and `Revenue` fields have the following restrictions when this object is updated:

- For a schedule of `Type Quantity`, you can't update a null `Revenue` value to non-null. Likewise for a schedule of `Type Revenue`, you can't update a null `Quantity` value to non-null.
- You can't null out the `Quantity` field for a schedule of `Type Quantity`. Likewise you can't null out the `Revenue` field for a schedule of `Type Revenue`.
- You can't null out either the `Revenue` or `Quantity` fields for a schedule of type `Both`.

Usage

OpportunityLineItemSchedule supports two types of schedules:

- `Quantity` schedules
- `Revenue` schedules

The user must have edit access rights on the Opportunity in order to create or update line item schedules on that opportunity.

Products and Schedules Must Be Enabled

The OpportunityLineItemSchedule object is defined only for those organizations that have the products and schedules features enabled. If the organization does not have the products and schedules features, the OpportunityLineItemSchedule object is not returned in a describe, and you can't describe or query OpportunityLineItemSchedule records.

Effects on Opportunities and Opportunity Line Items

OpportunityLineItemSchedule records affect opportunities and opportunity line items in the following ways:

- Inserting an OpportunityLineItemSchedule of `Type` “Revenue” or “Quantity” increments the `TotalPrice` field on the OpportunityLineItem by the OpportunityLineItemSchedule `Revenue` amount. Inserting an OpportunityLineItemSchedule of `Type` `Quantity` or `Both` increments the `Quantity` field on the OpportunityLineItem by the OpportunityLineItemSchedule `Quantity` amount.
- Creating an OpportunityLineItemSchedule record affects the original opportunity:
  1. The Opportunity `Amount` is incremented the by OpportunityLineItemSchedule revenue amount
  2. The Opportunity `ExpectedRevenue` is incremented by the line item schedule amount multiplied by the Opportunity `Probability`
- Deleting an OpportunityLineItemSchedule has a similar effect on the related OpportunityLineItem and Opportunity. Deleting an OpportunityLineItemSchedule decrements the OpportunityLineItem `TotalPrice` by the deleted OpportunityLineItemSchedule `Quantity` or `Revenue` amount. The Opportunity `Amount` is also decremented by the OpportunityLineItemSchedule `Quantity` or `Revenue` amount, and the Opportunity `ExpectedRevenue` is reduced by OpportunityLineItemSchedule `Quantity` or `Revenue` amount multiplied by the Opportunity `Probability`.

Deleting an Opportunity Line Item Schedule

Deleting the last remaining schedule will set the corresponding `HasQuantitySchedule` or `HasRevenueSchedule` flags (or both) to `false` on the parent line item.

SEE ALSO:

OpportunityLineItem

Product2

delete()

OpportunityOwnerSharingRule

Represents a rule for sharing an opportunity with users other than the owner.

Note: To enable access to this object for your org, contact Salesforce customer support. However, we recommend that you instead use Metadata API to programmatically update owner sharing rules because it triggers automatic sharing rule recalculation. The SharingRules Metadata API type is enabled for all orgs.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters. This field is available in API version 29.0 and later.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. This field is available in API version 24.0 and later. **Note:** When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort

Field	Details
	Description The ID representing the source group. Opportunities owned by users in the source group trigger the rule to give access.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.
`OpportunityAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of sharing being allowed. The possible values are: • `Read` • `Edit`
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the target user or group. The target user or group is being given access.

Usage

Use this object to manage the sharing rules for opportunities. General sharing and Territory-related sharing use this object.

Note: The original territory management feature is scheduled for retirement for all customers as of Summer '21. After the feature is retired, users can't access the original territory management feature and its underlying data. We encourage you to migrate to Enterprise Territory Management. We also strongly recommend that you keep a comprehensive backup of your territory data while you're still using the original territory management feature. For more information, see The Original Territory Management Module

Will Be Retired in the Summer '21 Release. The information in this topic applies to the original territory management feature only, and not to Enterprise Territory Management.

SEE ALSO:

Case

Metadata API Developer Guide: SharingRules

OpportunityPartner

This object represents a partner relationship between an Account and an Opportunity. An OpportunityPartner record is created automatically when a Partner record is created for a partner relationship between an account and an opportunity.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`AccountToId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the partner Account in the partner relationship.
`IsPrimary`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Indicates whether the account is the opportunity's primary partner (`true`) or not (`false`). Label is **Primary**.
`OpportunityId`	**Type** reference **Properties** Create, Filter, Group, Sort

Field	Details
	Description ID of the Opportunity that is in the partner relationship.
ReversePartnerId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the account in a partner relationship.
Role	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort **Description** The UserRole that the Account has on the Opportunity. For example, `Reseller` or `Manufacturer`.

Creating an Account-Opportunity Partner Relationship

When you create a partner relationship between an account and an opportunity (when you create a Partner record and specify the `OpportunityId` field), the API automatically creates an OpportunityPartner record with the corresponding values:

- The value of the Partner field `AccountToId` maps to the value of the OpportunityPartner field `AccountToId`.
- The values of the `OpportunityId`, `Role`, and `IsPrimary` fields in both records are the same.
- If you set the `IsPrimary` value to 1 (`true`) upon insert of a new OpportunityPartner, the `IsPrimary` value is automatically set to 0 (`false`) for any existing primary partners for that opportunity.

This mapping allows the API to manage the records and their relationships efficiently.

SEE ALSO:

Partner

AccountPartner

OpportunityShare

Represents a sharing entry on an Opportunity.

Supported Calls

`describeSObjects(), create(), delete(), query(), retrieve(), update(), upsert()`

Special Access Rules

As of Summer '20 and later, only users with access to the Opportunity object can access this object.

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field	Details
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
OpportunityAccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the user or group has to the opportunity. The possible values are: • `Read` • `Edit` • `All`—This value is not valid when creating, updating, or deleting records. This field must be set to an access level that's higher than the org's default access level for opportunities.
OpportunityId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the opportunity associated with this sharing entry. This field can't be updated.
RowCause	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort

Field	Details
	Description Reason that this sharing entry exists. You can write to this field when its value is either omitted or set to `Manual` (default). You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Valid values include: • `Owner`—The User is the owner of the opportunity. • `Manual`—The User or Group has access because a user with "All" access manually shared the opportunity with the user or group. • `Rule`—The User or Group has access via an opportunity sharing rule. • `GuestRule`—The User or Group has access via an opportunity guest user sharing rule. • `ImplicitChild`—The User or Group has access to the opportunity on the account associated with this opportunity. • `LpuImplicit`—The User has access to records owned by high-volume Experience Cloud site users via a share group. • `ARImplicit`—The User, who belongs to a partner or customer account, has access to the opportunity via an account relationship data sharing rule. • `Sales Team`—The User has access to the opportunity because the user is on the opportunity sales team for the opportunity. The OpportunityTeamMember object sets the access level. See OpportunityTeamMember for more information. • `Territory`—The forecast manager has access because they are assigned to a territory above the territory that is assigned the oppportunity.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group that has been given access to the opportunity. This field can't be updated.

Usage

This object allows you to determine which users and groups can view or edit opportunities owned by other users.

If you attempt to create a record that matches an existing record, any modified fields are updated, the system returns the existing record.

If an opportunity is shared in multiple ways with a user, you don't always see multiple sharing records. If a user has access to an opportunity for one or more of the following RowCause values, the records in the OpportunityShare object are compressed into one record with the highest level of access.

- `Manual`

- `Owner`

SEE ALSO:

Object Basics

OpportunitySplit

OpportunitySplit credits one or more opportunity team members with a portion of the opportunity amount. This object is available in API version 16.0 and later for pilot customers, and version 28.0 and later for others.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`OpportunityId`	**Type** reference **Properties** Create, FilterGroup, Sort **Description** ID of the opportunity for which the split is being created. Label is `Opportunity ID`.
`Split`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** Read-only. Automatically-generated number identifying the split within the opportunity.
`SplitAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Monetary amount of the split. Label is `Split Amount`.

Field	Details
SplitNote	**Type** string **Properties** Create, Filter, Group, Nillable,Sort, Update **Description** Enter any notes or comments about the split. Character limit is 255. Label is `Split Note`.
SplitOwnerId	**Type** reference **Properties** Create, Filter,Group, Sort **Description** The opportunity owner. Label is `User ID`.
SplitPercentage	**Type** percent **Properties** Create, Filter, Sort, Update **Description** Split percentage that this team member will receive. If the split type is validated to a 100% total, this number can range from 0 to 100. If the total isn't validated, this number can range from 0 to 1,000. Label is `Split (%)`.
SplitTypeId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Auto-generated, numeric ID for the split type defined by the OpportunitySplitType object. This field is available in API version 28 and later. If this field is blank, the system automatically specifies the default split type for the opportunity amount, which is validated to 100%.

Usage

Use the OpportunitySplit object to manage splits for an opportunity.

If you change the opportunity owner using the API, the old owner remains on the opportunity team with either Read-only access, or the level of access specified in your organization-wide defaults.

OpportunitySplitType

OpportunitySplitType provides unique labels and behavior for each split type. This object is available in API version 28.0 and later.

There are two default split types: revenue splits, which must total 100%, and overlay splits, which can total any percentage.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`, `update()`

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Create, Filter, Group, Sort, Update **Description** Describes the purpose of the split type, providing context to future developers.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. The unique name of the object in the API. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object’s name in a managed package and the changes are reflected in a subscriber’s organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Enables or disables the split type.

Field Name	Details
IsTotalValidated	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** If `true`, the split must total 100%. If `false`, the split can total any percentage.
Language	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates language of split labels in the user interface.
ManageableState	**Type** ManageableState enumerated list **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Indicates the manageable state of the specified component that is contained in a package: • `beta` • `deleted` • `deprecated` • `deprecatedEditable` • `installed` • `installedEditable` • `released` • `unmanaged` This field is available in API version 38.0 and later.
MasterLabel	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The user-interface label for the split type.
NamespacePrefix	**Type** string

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix. This field can't be accessed unless the logged-in user has the Customize Application permission.
`SplitEntity`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The containing record type, such as an opportunity. Available in API version 30 and later.
`SplitField`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** Indicates which currency field of the opportunity object is split. Available in API version 30 and later.
`SplitDataStatus`	**Type** picklist **Properties** Filter, Group, Nillable,Restricted picklist, Sort,Update **Description** Indicates the status of the split type. Available in API version 30 and later.

OpportunityStage

Represents the stage of an Opportunity in the sales pipeline, such as New Lead, Negotiating, Pending, Closed, and so on.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`ApiName`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** Uniquely identifies a picklist value so it can be retrieved without using an id or master label.
`DefaultProbability`	**Type** percent **Properties** Filter, Nillable, Sort, **Description** The default percentage estimate of the confidence in closing a specific opportunity for this opportunity stage value. Label is **Probability (%)**.
`Description`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Description of this opportunity stage value. Limit: 255 characters.
`ForecastCategory`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The default forecast category for this opportunity stage value. The forecast category automatically determines how opportunities are tracked and totaled in a forecast.

Field	Details
ForecastCategoryName	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Available in API version 12.0 and later. The default forecast category value for this opportunity stage value.
IsActive	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this opportunity stage value is active (`true`) or not (`false`). Inactive opportunity stage values are not available in the picklist and are retained for historical purposes only.
IsClosed	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this opportunity stage value represents a closed opportunity (`true`) or not (`false`). Multiple opportunity stage values can represent a closed opportunity. Label is **Closed**.
IsWon	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this opportunity stage value represents a won opportunity (`true`) or not (`false`). Multiple opportunity stage values can represent a won opportunity. Label is **Won**.
MasterLabel	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Master label for this opportunity stage value. This display value is the internal label that does not get translated. Limit: 255 characters.

Field	Details
SortOrder	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Number used to sort this value in the opportunity stage picklist. These numbers are not guaranteed to be sequential, as some previous opportunity stage values might have been deleted.

Usage

This object represents a value in the opportunity stage picklist, which provides additional information about the stage of a Opportunity, such as its probability or forecast category. Query this object to retrieve the set of values in the opportunity stage picklist, and then use that information while processing Opportunity records to determine more information about a given opportunity. For example, the application could test whether a given opportunity is won or not based on its `StageName` value and the value of the `IsWon` property in the associated OpportunityStage object.

This object is read-only via the API.

SEE ALSO:

Object Basics

OpportunityTag

Associates a word or short phrase with an Opportunity.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
ItemId	**Type** reference **Properties** Create, Filter **Description** ID of the tagged item.

Field Name	Details
Name	**Type** string **Properties** Create, Filter **Description** Name of the tag. If this value does not already exist, a new TagDefinition is created and becomes the parent of this Tag object. Otherwise, a TagDefinition with the same name becomes the parent of this Tag object. Parent relationships are created automatically.
TagDefinitionId	**Type** reference **Properties** Filter **Description** ID of the parent TagDefinition object that owns the tag.
Type	**Type** picklist **Properties** Create, Filter, Restricted picklist **Description** Defines the visibility of a tag. Valid values: • Public—The tag can be viewed and manipulated by all users in an organization. • Personal—The tag can be viewed or manipulated only by a user with a matching OwnerId.

Usage

OpportunityTag stores the relationship between its parent TagDefinition and the Opportunity being tagged. Tag objects act as metadata, allowing users to describe and organize their data.

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

OpportunityTeamMember

Represents a User on the opportunity team of an Opportunity.

See also UserTeamMember, which represents a User who is on the default opportunity team of another user.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`CurrencyIsoCode`	**Type** picklist **Properties** Filter, Restricted picklist **Description** Available only for orgs with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the org.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**. Note: An OpportunityTeamMember record that is deleted is not moved to the Recycle Bin and cannot be undeleted, unless the record was cascade-deleted when deleting a related Opportunity. For directly deleted OpportunityTeamMember records, don't use the `isDeleted` field to detect deleted records in SOQL queries or `queryAll()` calls. Instead, use `getDeleted()`.
`Name`	**Type** string **Properties** Filter, Nillable, Sort **Description** The team member name. This read-only field is available in API version 30.0 and later.
`OpportunityAccessLevel`	**Type** picklist **Properties** Filter, Nillable, Restricted picklist **Description** Opportunity access level for this team member. Valid values: • `Read`

Field	Details
	• `Edit` This field is supported in triggers, but not in workflows or validation rules. It is editable in API version 36.0 and later.
`OpportunityId`	**Type** reference **Properties** Create, Filter **Description** Required. ID of the Opportunity associated with this opportunity team. This field can't be updated.
`PhotoURL`	**Type** URL **Properties** Filter, Nillable, Sort, Group **Description** Read only. Retrieves the users Chatter photo URL. This field is available in API version 32.0 and later.
`TeamMemberRole`	**Type** picklist **Properties** Create, Filter, Nillable, Update **Description** Role that the team member has on the opportunity. The org's admin sets the valid values in the Opportunity Team Roles picklist. Label is **Team Role**.
`Title`	**Type** string **Properties** Filter, Nillable, Sort, Group **Description** Read only. Retrieves the user's title. This field is available in API version 36.0 and later.
`UserId`	**Type** reference **Properties** Create, Filter **Description** Required. ID of the User who is a member of the opportunity team. This field can't be updated.

Usage

If you create a record for this object and it matches an existing record, the system updates any modified fields and returns the existing record.

In the user interface, users can set up an opportunity team for the opportunities they own. The opportunity team includes other users that are working on the opportunity with them. This object is available only in organizations that have enabled team selling.

Note: The behavior for changing ownership of opportunities is different using the user interface when the previous owner is on an opportunity team. For example, when you change the owner of an opportunity using the API, the previous owner's access becomes Read Only or the access specified in your organization-wide default for opportunities, whichever is greater. However, performing this same action in the user interface allows you to select the access level for the previous owner when the previous owner is on an opportunity team.

SEE ALSO:

UserTeamMember

Order

Represents an order associated with a contract or an account.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`AccountId`	**Type** reference **Properties** Create, Filter, Nillable, Group, Sort, Update **Description** Required. ID of the Account associated with this order. Can only be updated when the order's `StatusCode` value is *`Draft`*.
`ActivatedById`	**Type** reference **Properties** Filter, Group, Nillable, Sort,Update **Description** ID of the User who activated this order.

Field Name	Details
ActivatedDate	**Type** dateTime **Properties** Filter, Nillable, Sort, Update **Description** Date and time when the order was activated.
BillingAddress	**Type** address **Properties** Filter, Nillable **Description**
BillingCity	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** City for the billing address for this order. Maximum size is 40 characters.
BillingCountry	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Country for the billing address for this order. Maximum size is 80 characters.
BillingCountryCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ISO country code for the billing address for this order.
BillingEmailAddress	**Type** email **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Email address for this order's billing address.

Field Name	Details
	To access Commerce Orders fields, your org must have a Salesforce Order Management license or a B2B Commerce on Lightning Experience License. This field is available in API v48.0 and later.
`BillingGeocodeAccuracy`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Accuracy level of the geocode of the address.
`BillingLatitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `BillingLongitude` to specify the precise geolocation of a billing address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
`BillingLongitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `BillingLatitude` to specify the precise geolocation of a billing address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places.
`BillingPhoneNumber`	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Phone number for this order's billing address. To access Commerce Orders fields, your org must have a Salesforce Order Management license or a B2B Commerce on Lightning Experience License. This field is available in API v48.0 and later.
`BillingPostalCode`	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** Postal code for the billing address for this order. Maximum size is 20 characters.
`BillingState`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** State for the billing address for this order. Maximum size is 80 characters.
`BillingStateCode`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ISO state code for the order's billing address.
`BillingStreet`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Street address for the billing address.
`BillToContactId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the contact that the order is billed to.
`CompanyAuthorizedById`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the user who authorized the account associated with the order.
`CompanyAuthorizedDate`	**Type** date

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The date on which your organization authorized the order.
`ContractId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the contract associated with this order. Can only be updated when the order’s `StatusCode` value is *`Draft`*.
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Three-letter ISO 4217 currency code.
`CustomerAuthorizedById`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the contact who authorized the order.
`CustomerAuthorizedDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Date on which the contact authorized the order.
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of the order.

Field Name	Details
EffectiveDate	**Type** date **Properties** Create, Filter, Group, Sort, Update **Description** Date at which the order becomes effective. Label is **Order Start Date**.
EndDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Date at which the order ends. Label is **Order End Date**.
GrandTotalAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Sum of `OrderTotalAmount` and `OrderTotalTaxAmount`. To access Commerce Orders fields, your org must have a Salesforce Order Management license or a B2B Commerce on Lightning Experience License. This field is available in API v48.0 and later.
IsReductionOrder	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Read-only. Determines whether an order is a reduction order. Label is **Reduction Order**.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.

Field Name	Details
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (LastReferencedDate) but not viewed it.
Name	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Name for this order.
OpportunityId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID for the opportunity that's associated with this order.
OrderedDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date and time that the order was placed. To access Commerce Orders fields, your org must have a Salesforce Order Management license or a B2B Commerce on Lightning Experience License. This field is available in API v48.0 and later.
OrderNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** Order number assigned to this order (not the unique, system-generated ID assigned during creation). Maximum size is 30 characters.

Field Name	Details
OrderReferenceNumber	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Order reference number assigned to this order. Maximum size is 80 characters.
OriginalOrderId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort **Description** Optional. ID of the original order that a reduction order is reducing, if the reduction order is reducing a single order. Label is **Original Order**. Editable only if `isReductionOrder` is *`true`*. If the reduction order is reducing more than one order, leave blank.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Required. ID of the User or queue that owns this order.
PoDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Date of the purchase order.
PoNumber	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Number identifying the purchase order. Maximum is 80.
Pricebook2Id	**Type** reference

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** Required. ID of the price book associated with this order.
`QuoteId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the quote that's associated with this order. If you set `QuoteId` to null, `QuoteLineItemId` on all of the order's child order products is set to null.
`RecordTypeId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the record type assigned to this order.
`RelatedOrderId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The original order that a change order was created from. To access Commerce Orders fields, your org must have a Salesforce Order Management license or a B2B Commerce on Lightning Experience License. This field is available in API v48.0 and later.
`SalesChannelId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Reference to a sales channel entity. To access Commerce Orders fields, your org must have a Salesforce Order Management license or a B2B Commerce on Lightning Experience License. This field is available in API v48.0 and later.

Field Name	Details
ShippingAddress	**Type** address **Properties** Filter, Nillable **Description** Shipping address for the order.
ShippingCity	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** City of the shipping address. Maximum size is 40 characters.
ShippingCountry	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Country of the shipping address. Maximum size is 80 characters.
ShippingCountryCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ISO country code for the order's shipping address.
ShippingGeocodeAccuracy	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Accuracy level of the geocode of the shipping address.
ShippingLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update

Field Name	Details
	Description Used with `ShippingLongitude` to specify the precise geolocation of a shipping address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
`ShippingLongitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `ShippingLatitude` to specify the precise geolocation of an address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places.
`ShippingPostalCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Postal code of the shipping address. Maximum size is 20 characters.
`ShippingState`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** State of the shipping address. Maximum size is 80 characters.
`ShippingStateCode`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ISO state code for the order's shipping address.
`ShippingStreet`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Street address of the shipping address. Maximum of 255 characters.

Field Name	Details
`ShipToContactId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the contact that the order is shipped to.
`Status`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Picklist of values that indicate order status. Each value is within one of two status categories defined in `StatusCode`. For example, the status picklist might contain *`Draft`*, *`Ready for Review`*, and *`Ready for Activation`* values with a `StatusCode` of *`Draft`*.
`StatusCode`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort, Update **Description** The status category for the order. An order can be either *`Draft`* or *`Activated`*. Label is **Status Category**.

`TaxLocaleType`	**Type**
	picklist
	Properties
	Filter, Group, Restricted picklist, Sort, Update
	Description
	The type of tax calculation that Salesforce uses for the order's order items. VAT regions use gross tax, which includes tax in all sale amounts. US regions use net tax, which calculates tax separately from the initial sale amount and then adds the sale and tax amounts together in a total.
	Use `TaxLocaleType` to determine which types of tax fields to show on your order. If `TaxLocaleType` is null, the order shows all tax fields.
	Gross Tax Fields
	`TotalAdjDeliveryAmtWithTax`
	`TotalAdjProductAmtWithTax`
	`TotalProductAdjDistAmtWithTax`
	`TotalDeliveryAdjDistAmtWithTax`

Field Name	Details
	To access Commerce Orders fields, your org must have a Salesforce Order Management license or a B2B Commerce on Lightning Experience License. This field is available in API v49.0 and later.
`TotalAdjDeliveryAmtWithTax`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Sum of delivery line amounts, delivery line adjustments, and tax. Order products with null Type fields aren't included. This is a gross tax field. To access Commerce Orders fields, your org must have a Salesforce Order Management license or a B2B Commerce on Lightning Experience License. This field is available in API v49.0 and later.
`TotalAdjProductAmtWithTax`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Sum of product line amounts, line adjustments, and tax. Order products with null Type fields aren't included. This is a gross tax field. To access Commerce Orders fields, your org must have a Salesforce Order Management license or a B2B Commerce on Lightning Experience License. This field is available in API v49.0 and later.
`TotalAdjustedDeliveryAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Sum of delivery line amounts and delivery line adjustments. Order products with null Type fields aren't included. To access Commerce Orders fields, your org must have a Salesforce Order Management license or a B2B Commerce on Lightning Experience License. This field is available in API v48.0 and later.
`TotalAdjustedDeliveryTaxAmount`	**Type** currency

Field Name	Details
	Properties Filter, Nillable, Sort **Description** Sum of delivery line tax amounts and delivery line tax adjustments. To access Commerce Orders fields, your org must have a Salesforce Order Management license or a B2B Commerce on Lightning Experience License. This field is available in API v48.0 and later.
TotalAdjustedProductAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Sum of product line amounts and line adjustments. Order products with null Type fields aren't included. To access Commerce Orders fields, your org must have a Salesforce Order Management license or a B2B Commerce on Lightning Experience License. This field is available in API v48.0 and later.
TotalAdjustedProductTaxAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Sum of line tax amounts and line tax adjustments. Order products with null Type fields aren't included. To access Commerce Orders fields, your org must have a Salesforce Order Management license or a B2B Commerce on Lightning Experience License. This field is available in API v48.0 and later.
TotalAmount	**Type** currency **Properties** Filter, Sort **Description** The total amount for the order products associated with this order. This field is available in API v48.0 and later.
TotalDeliveryAdjDistAmount	**Type** currency

Field Name	Details
	Properties Filter, Nillable, Sort **Description** Roll-up of the order's delivery adjustment distributed amounts. Used only when the Order Adjustment Group has a Type value of Header. To access Commerce Orders fields, your org must have a Salesforce Order Management license or a B2B Commerce on Lightning Experience License. This field is available in API v48.0 and later.
`TotalDeliveryAdjDistAmtWithTax`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Roll-up of the order's delivery adjustment distributed amounts and tax. Used only when the Order Adjustment Group has a Type value of Header. This is a gross tax field. To access Commerce Orders fields, your org must have a Salesforce Order Management license or a B2B Commerce on Lightning Experience License. This field is available in API v49.0 and later.
`TotalDeliveryAdjDistTaxAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Roll-up of the order's delivery adjustment distributed tax amounts. Used only when the Order Adjustment Group has a Type value of Header. To access Commerce Orders fields, your org must have a Salesforce Order Management license or a B2B Commerce on Lightning Experience License. This field is available in API v48.0 and later.
`TotalProductAdjDistAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Roll-up of the order's product adjustment distributed amounts. Order products with null Type fields aren't included. Used only when the Order Adjustment Group has a Type value of Header.

Field Name	Details
	To access Commerce Orders fields, your org must have a Salesforce Order Management license or a B2B Commerce on Lightning Experience License. This field is available in API v48.0 and later.
`TotalProductAdjDistAmtWithTax`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Roll-up of the order's product adjustment distributed amounts. Order products with null Type fields aren't included. Used only when the Order Adjustment Group has a Type value of Header. This is a gross tax field. To access Commerce Orders fields, your org must have a Salesforce Order Management license or a B2B Commerce on Lightning Experience License. This field is available in API v49.0 and later.
`TotalProductAdjDistTaxAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Roll-up of the order's product adjustment distributed tax amounts. Order products with null Type fields aren't included. Used only when the Order Adjustment Group has a Type value of Header. To access Commerce Orders fields, your org must have a Salesforce Order Management license or a B2B Commerce on Lightning Experience License. This field is available in API v48.0 and later.
`TotalTaxAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Roll up of all tax on the order. Includes delivery taxes, price adjustment taxes, and product taxes. To access Commerce Orders fields, your org must have a Salesforce Order Management license or a B2B Commerce on Lightning Experience License. This field is available in API v48.0 and later.

Field Name	Details
`Type`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** If you want to show more information about your order, you can add custom values to the `Type` picklist. By default, the `Type` field doesn't perform any actions or show any values.

Usage

The `Status` field specifies the current state of an order. Status strings represent its current state (*`Draft`* or *`Activated`*).

When a client application creates an order, the `Status Code` must be *`Draft`* and the `Status` must be any value that corresponds to a `Status Code` of *`Draft`*. The application can then activate an order by updating it and setting the value in its `Status` field to an *`Activated`* state; however, the `Status` field is the only field you can update when activating the order.

After an order is activated, your client application can change the `Status` back to the *`Draft`* state—but only if the order doesn't have any child reduction order products. Your client application can delete orders when the `Status` is *`Draft`* but not when its `Status` is *`Activated`*.

Client applications can use the API to create, update, delete, and query any Attachment associated with an order.

Orders Without Price Books

If your organization manages products and Price books in an external platform, you can use Salesforce API to create orders and order items without values for their Price book and Price book entry fields. This feature is available only for Salesforce orgs with the B2B Commerce, B2B Commerce Starter, B2B Commerce Growth, or B2B Commerce Plus packages. Admins enable orders without Price books by going to Salesforce Order Settings and selecting the Optional Price Book setting.

In a standard order, Salesforce prompts the sales rep to select a Price book when they add the first order product to the order. The sales rep can then add order products that have price book entries in the selected price book. In an order without a Price book, Salesforce hides the order's Add Products button and Edit Products button so that sales reps must manage their products and price books using their external system.

You can create orders without Price books only by creating an order with Salesforce API and leaving the `Pricebook2Id` field null. Orders without Price books follow several different guidelines compared to standard orders.

- Orders without price books don't support reduction orders or change orders.
- Order products without price book entries require list prices.
- Orders without price books support only order items without price book entries. Orders with price books support only order items with price book entries.
- Important: Orders without Price books are supported with B2B licenses only. Salesforce Order Management requires price books for orders and price book entries for order products.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

OrderFeed (API version 29.0)
Feed tracking is available for the object.

OrderHistory
History is available for tracked fields of the object.

OrderOwnerSharingRule
Sharing rules are available for the object.

SEE ALSO:

OrderHistory

OrderItem

OrderSummary

SalesChannel

OrderAdjustmentGroup

Group containing a set of adjustments applied to an order. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

To access Commerce Orders entities, your org must have a Salesforce Order Management license. Commerce Orders entities are available only in Lightning Experience.

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of the order adjustment group.
`GrandTotalAmount`	**Type** currency

Field	Details
	Properties Filter, Nillable, Sort **Description** The sum of all total amounts of all adjustments in this group, including tax.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** User-defined name of the order adjustment group.
OrderId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the order related to the adjustments in this order adjustment group.
RelatedAdjustmentGroupId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the original order's adjustment group. Useful for reference in change order scenarios.
TotalAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** The total of all order adjustments in this order adjustment group, excluding tax.
TotalTaxAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** The total tax for all order adjustments in this order adjustment group.
Type	**Type** picklist

Field	Details
	Properties Create, Filter, Group, Restricted picklist, Sort, Update **Description** Shows the type of adjustment made. Possible values are: • `Header:` — The adjustment was applied to the order's balance, and then distributed among the order products in the adjustment group. • `SplitLine`— The adjustment was applied to order product balances for the order products in the adjustment group.

OrderAdjustmentGroupSummary

Represents the current properties and state of a group of related price adjustments. Associated with a set of OrderItemAdjustmentLineSummaries that apply to OrderItemSummaries belonging to one OrderSummary. Corresponds to one or more order adjustment group objects, consisting of an original object and any change objects applicable to it. This object is available in API version 48.0 and later.

An OrderAdjustmentGroupSummary can represent an adjustment to an entire order as a group of adjustments to each of its products. For example, representing "10% off the order" as a set of 10% off adjustments to each product on the order. It can also represent an adjustment that applies to a subset of the products on an order. For example, representing "buy one, get one 50% off" as a 25% off adjustment to each of two products.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is only available in Salesforce Order Management orgs or if the B2B Commerce on Lightning Experience license is enabled.

Fields

Field	Details
`CurrencyIsoCode`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** ISO code for the currency of the OrderSummary associated with the adjustments in the group. The default value is USD.

Field	Details
	Possible values are: • DKK—Danish Krone • EUR—Euro • GBP—British Pound • USD—U.S. Dollar This field is available in API version 49.0 and later.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of the OrderAdjustmentGroupSummary. This field can be edited.
GrandTotalAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total, including tax, of the associated OrderItemAdjustmentLineSummaries.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Name of the OrderAdjustmentGroupSummary.
OrderSummaryId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the OrderSummary associated with the OrderAdjustmentGroupSummary.
OriginalOrderAdjGroupId	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description ID of the original OrderAdjustmentGroup associated with this summary object. Nillable=true only if the associated order summary is unmanaged. For managed order summaries, nillable=false.
`TotalAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total, not including tax, of the associated OrderItemAdjustmentlineSummaries.
`TotalTaxAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Tax on the TotalAmount.
`Type`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Type of the OrderAdjustmentGroupSummary. Header represents an order-level adjustment with an OrderItemAdjustmentLineSummary for each OrderItemSummary on the OrderSummary. SplitLine represents any other related set of OrderItemAdjustmentLineSummaries. Possible values are: • `Header` • `SplitLine` If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.

SEE ALSO:

OrderAdjustmentGroup
OrderItemAdjustmentLineSummary

OrderDeliveryGroup

A group of order items that share a delivery method and address. The delivery method and address are used during the fulfillment process, such as shipping as a gift, downloading, picking up in store, or shipping to a standard address This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

To access Commerce Orders entities, your org must have a Salesforce Order Management license. Commerce Orders entities are available only in Lightning Experience.

Fields

Field	Details
`DeliverToAddress`	**Type** address **Properties** Filter, Nillable **Description** The delivery group's order items are delivered to this address. Created based on the values of the other `DeliverTo` fields.
`DeliverToCity`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** City address value. Sent to `DeliverToAddress`.
`DeliverToCountry`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Country address value. Sent to `DeliverToAddress`
`DeliverToGeocodeAccuracy`	**Type** picklist

Field	Details
	Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Geocode accuracy address value. Sent to `DeliverToAddress`.
`DeliverToLatitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Latitutde address value. Sent to `DeliverToAddress`.
`DeliverToLongitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Longitude address value. Sent to `DeliverToAddress`.
`DeliverToName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Name of the delivery recipient. Sent to `DeliverToAddress`.
`DeliverToPostalCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Postal Code address value. Sent to `DeliverToAddress`.
`DeliverToState`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** State address value. Sent to `DeliverToAddress`.

Field	Details
DeliverToStreet	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Street address value. Sent to DeliverToAddress.
DeliveryInstructions	**Type** textarea **Properties** Create, Nillable, Update **Description** Text field for users to add other delivery instructions.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** User-defined description for this delivery group.
DesiredDeliveryDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The buyer's target delivery date for the order items included in the delivery group.
EmailAddress	**Type** email **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The buyer's email address.
GiftMessage	**Type** textarea **Properties** Create, Nillable, Update

Field	Details
	Description An optional gift message that the buyer can define if they're sending the order items as a gift to another recipient. Applies to all order items in the delivery group.
GrandTotalAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** The sum of the group's total delivery amount and total tax amount.
IsGift	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** All items in the delivery group are gifts.
OrderDeliveryGroupNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** Unique number used for referencing this order delivery group.
OrderDeliveryMethodId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the order delivery method related to this order delivery group.
OrderId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the parent order for this order delivery group. An order can have mutliple order delivery groups.
PhoneNumber	**Type** phone

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** Phone number of the buyer.
PromisedDeliveryDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Merchant-defined date that the items in this group will be delivered to the customer. Usually defined based on an estimated date from the shipping provider.
RelatedDeliveryGroupId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The original delivery group. Used for reference in change order scenarios.
TotalAdjustmentAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** The sum of all adjustments made to order items in the order delivery group.
TotalAdjustmentAmtWithTax	**Type** currency **Properties** Filter, Nillable, Sort **Description** The sum of all adjustments made to order items in the order delivery group, including tax. This is a gross tax field. To access Commerce Orders fields, your org must have a Salesforce Order Management license. Commerce Orders fields are available only in Lightning Experience. This field is available in API v49.0 and later.
TotalAdjustmentTaxAmount	**Type** currency

Field	Details
	Properties Filter, Nillable, Sort **Description** The sum of all adjustments made to tax lines for order items in the order delivery group.
TotalAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** The sum of all Total Amount fields on order items within this delivery group. On an order item, the total amount equals the quantity multiplied by the unit price, including adjustments and tax.
TotalLineAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** The sum of all Total Line Amount fields on order items within this delivery group. On an order item, the total line amount equals the quantity multiplied by the unit price, before adjustments or tax.
TotalLineAmtWithTax	**Type** currency **Properties** Filter, Nillable, Sort **Description** The sum of all TotalLineAmtWithTax fields on order items within this delivery group. On an order item, the total line amount with tax equals the quantity multiplied by the unit price, plus tax, before adjustments. This is a gross tax field. To access Commerce Orders fields, your org must have a Salesforce Order Management license. Commerce Orders fields are available only in Lightning Experience. This field is available in API v49.0 and later.
TotalLineTaxAmount	**Type** currency **Properties** Filter, Nillable, Sort

Field	Details
	Description The sum of all Total Line Tax Amount fields on order items within this delivery group. On an order item, the total line tax amount equals the total tax for that line.
`TotalTaxAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** The sum of all Total Tax Amount fields on order items within this order delivery group.

OrderDeliveryGroupSummary

Represents the current properties and state of a group of OrderItemSummaries, belonging to one OrderSummary, to be fulfilled using the same delivery method and delivered to the same address. A single shipment can include them all, but that is not guaranteed. Corresponds to one or more order delivery group objects, consisting of an original object and any change objects applicable to it. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is only available in Salesforce Order Management orgs or if the B2B Commerce on Lightning Experience license is enabled.

Fields

Field	Details
`CurrencyIsoCode`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** ISO code for the currency of the OrderSummary associated with the OrderDeliveryGroupSummary. The default value is USD. Possible values are: • `DKK`—Danish Krone • `EUR`—Euro

Field	Details
	• `GBP`—British Pound • `USD`—U.S. Dollar This field is available in API version 49.0 and later.
`DeliverToAddress`	**Type** address **Properties** Filter, Nillable **Description** Address of the recipient. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.
`DeliverToCity`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Recipient address city.
`DeliverToCountry`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Recipient address country.
`DeliverToGeocodeAccuracy`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Accuracy of the geocode for the recipient address. Possible values are: • `Address` • `Block` • `City` • `County` • `ExtendedZip` • `NearAddress`

Field	Details
	• `Neighborhood` • `State` • `Street` • `Unknown` • `Zip`
`DeliverToLatitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with FulfilledToLongitude to specify the precise geolocation of the recipient address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
`DeliverToLongitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with FulfilledToLatitude to specify the precise geolocation of the recipient address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
`DeliverToName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Name on the recipient address. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.
`DeliverToPostalCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Recipient address postal code.
`DeliverToState`	**Type** string

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** Recipient address state.
DeliverToStreet	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Recipient address street.
DeliveryInstructions	**Type** textarea **Properties** Create, Nillable, Update **Description** Special instructions for the delivery. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of the OrderDeliveryGroupSummary. This field can be edited.
DesiredDeliveryDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Desired date for delivery. This field is informational, available for customizations. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.

Field	Details
EmailAddress	**Type** email **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Email address of the recipient. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.
GiftMessage	**Type** textarea **Properties** Create, Nillable, Update **Description** Gift message to include. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.
GrandTotalAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total, including adjustments and tax, of the delivery charges associated with the OrderDeliveryGroupSummary. This value only includes OrderItemSummaries of type code Charge.
IsGift	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the OrderDeliveryGroupSummary represents a gift. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.
OrderDeliveryGroupSummaryNumber	**Type** string

Field	Details
	Properties Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** ID of the OrderDeliveryGroupSummary.
`OrderDeliveryMethodId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the order delivery method specified for the OrderDeliveryGroupSummary. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.
`OrderSummaryId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the OrderSummary associated with the OrderDeliveryGroupSummary.
`OriginalOrderDeliveryGroupId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the original order delivery group associated with this summary object. Nillable=true only if the associated order summary is unmanaged. For managed order summaries, nillable=false.
`PhoneNumber`	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Phone number of the recipient. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.

Field	Details
PromisedDeliveryDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Promised date for delivery. This field is informational, available for customizations. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.
TotalAdjustmentAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total price adjustments applied to delivery charges associated with the OrderDeliveryGroupSummary. This value only includes adjustments to OrderItemSummaries of type code Charge.
TotalAdjustment AmtWithTax	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of the price adjustments applied to the delivery charges associated with the OrderDeliveryGroupSummary, inclusive of tax. This amount is equal to TotalAdjustmentAmount + TotalAdjustmentTaxAmount. This field is available in API version 49.0 and later.
TotalAdjustment TaxAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Tax on the TotalAdjustmentAmount.
TotalAmount	**Type** currency **Properties** Filter, Nillable, Sort

Field	Details
	Description Total, including adjustments but not tax, of the delivery charges associated with the OrderDeliveryGroupSummary. This value only includes adjustments to OrderItemSummaries of type code Charge.
`TotalLineAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total, not including adjustments or tax, of the delivery charges associated with the OrderDeliveryGroupSummary.
`TotalLineAmtWithTax`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total of the delivery charges associated with the OrderDeliveryGroupSummary, inclusive of tax. This amount is equal to TotalLineAmount + TotalLineTaxAmount. This field is available in API version 49.0 and later.
`TotalLineTaxAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Tax on the TotalLineAmount.
`TotalTaxAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Tax on the TotalAmount.

SEE ALSO:

OrderDeliveryGroup

OrderItemSummary

OrderDeliveryMethod

Shows the customizations and options that a buyer selected for their delivery method. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

To access Commerce Orders entities, your org must have a Salesforce Order Management license. Commerce Orders entities are available only in Lightning Experience.

Fields

Field	Details
`Carrier`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The carrier that the buyer chose for their delivery method. Developers must add values to this field.
`ClassOfService`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The carrier class of service that the buyer chose for their delivery method. Developers must add values to this field.
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of the delivery method.
`IsActive`	**Type** boolean

Field	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** Assign new delivery groups to active delivery methods.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. Default name of this record.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The user who owns an order delivery method record.
ProductId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Optional. This product represents a delivery charge order product for a delivery using this delivery method. For example, you could create a product that represents an overnight express charge and assign it to an overnight express delivery method.

Field	Details
`ReferenceNumber`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Reference number for an external delivery method.

OrderHistory

Represents historical information about changes that have been made to the standard fields of the associated order, or to any custom fields with history tracking enabled.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Fields

Field Name	Details
`DataType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Data type of the field that was changed.
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Name of the order field that was modified, or a special value to indicate some other modification to the order.
`NewValue`	**Type** anyType **Properties** Nillable, Sort

Field Name	Details
	Description New value of the modified order field. Maximum of 255 characters.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** Previous value of the modified order field. Maximum of 255 characters.
`OrderId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the order associated with this record.

Usage

Order history entries are automatically created each time an order is modified.

Two rows are added to this record when foreign key fields change. One row contains the foreign key object names that display in the online application. For example, `Jane Doe` is recorded as the name of a Contact. The other row contains the actual foreign key ID that is only returned to and visible from the API.

This object respects field-level security on the parent object.

SEE ALSO:

Order

OrderItem

Represents an order product that your organization sells.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AdjustedLineAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Line amount following line adjustments, excluding tax. To access Commerce Orders fields, your org must have a Salesforce Order Management license. Commerce Orders fields are available only in Lightning Experience. This field is available in API v48.0 and later.
`AdjustedLineAmtWithTax`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Line amount following line adjustments, including tax. This is a gross tax field. To access Commerce Orders fields, your org must have a Salesforce Order Management license. Commerce Orders fields are available only in Lightning Experience. This field is available in API v49.0 and later.
`AvailableQuantity`	**Type** double **Properties** Filter, Nillable, Sort **Description** Amount of an order product that is available to be reduced. Value must be greater than or equal to 0. An order product is reducible only if `AvailableQuantity` is greater than 0. Value is always 0 if the order product's parent order is a reduction order.
`Description`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Text description of this object.

Field Name	Details
EndDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Optional. Last day the order product is available.
GrossUnitPrice	**Type** currency **Properties** Filter, Nillable, Sort **Description** Unit price including tax. This is a VAT field that includes tax. Salesforce populates it on order creation only when `Order.TaxLocaleType` has a value of Gross.
LineNumber	**Type** int **Properties** Create, Filter, Group, Nillable, Sort **Description** Used to organize lines on the order. To access Commerce Orders fields, your org must have a Salesforce Order Management license. Commerce Orders fields are available only in Lightning Experience. This field is available in API v48.0 and later.
ListPrice	**Type** currency **Properties** Create, Filter, Nillable, Sort **Description** List price for the order product. Value is inherited from the associated `PriceBookEntry` upon order product creation.
OrderDeliveryGroupId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The delivery group for the order product.

Field Name	Details
	To access Commerce Orders fields, your org must have a Salesforce Order Management license. Commerce Orders fields are available only in Lightning Experience. This field is available in API v48.0 and later.
`OrderId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the order that this order product is a child of.
`OrderItemNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** Automatically generated number that identifies the order product.
`OriginalOrderItemId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** Required if `isReductionOrder` on the parent order is *`true`*. ID of the original order product being reduced.
`PricebookEntryId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the associated PricebookEntry. This field must be specified when creating OrderItem records. It can't be changed in an update.
`Product2Id`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the Product2 associated with this OrderItem.

Field Name	Details
Quantity	**Type** double **Properties** Create, Filter, Sort, Update **Description** Number of units of this order product.
QuoteLineItemId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the associated quote line item. If this field is specified, the quote line item's QuoteId must match the QuoteId for the order product's parent order.
RelatedOrderItemID	**Type** reference **Properties** Filter, Sort, Group **Description** For change orders, shows the original order product. To access Commerce Orders fields, your org must have a Salesforce Order Management license. Commerce Orders fields are available only in Lightning Experience. This field is available in API v48.0 and later.
RoundedLineAmount	**Type** currency **Properties** Filter, Sort **Description** The rounded line amount, before tax and adjustments. Currency with decimal values of 0.5 and higher are rounded to the next-highest whole unit of currency. To access Commerce Orders fields, your org must have a Salesforce Order Management license. Commerce Orders fields are available only in Lightning Experience. This field is available in API v48.0 and later.
RoundedLineAmtWithTax	**Type** currency

Field Name	Details
	Properties Filter, Nillable, Sort **Description** The rounded line amount, including tax. Currency with decimal values of 0.5 and higher are rounded to the next-highest whole unit of currency. To access Commerce Orders fields, your org must have a Salesforce Order Management license. Commerce Orders fields are available only in Lightning Experience. This field is available in API v49.0 and later.
`ServiceDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Start date for the order product. Label is **Start Date**.
`TotalAdjustedLineTaxAmount`	**Type** currency **Properties** Filter, Sort **Description** Sum of line tax amount and line adjustment tax amounts. To access Commerce Orders fields, your org must have a Salesforce Order Management license. Commerce Orders fields are available only in Lightning Experience. This field is available in API v48.0 and later.
`TotalAdjustmentAmount`	**Type** currency **Properties** Filter, Sort **Description** Roll-up of all the order product’s price adjustments. To access Commerce Orders fields, your org must have a Salesforce Order Management license. Commerce Orders fields are available only in Lightning Experience. This field is available in API v48.0 and later.

Field Name	Details
`TotalAdjustmentAmtWithTax`	**Type** currency **Properties** Filter, Sort **Description** Roll-up of all the order product's price adjustments, including tax. This is a gross tax field. To access Commerce Orders fields, your org must have a Salesforce Order Management license. Commerce Orders fields are available only in Lightning Experience. This field is available in API v49.0 and later.
`TotalAdjustmentDistAmount`	**Type** currency **Properties** Filter, Sort **Description** Roll-up of all adjustments on the order. Used only if the OrderAdjustmentGroup has a Type value of Header. To access Commerce Orders fields, your org must have a Salesforce Order Management license. Commerce Orders fields are available only in Lightning Experience. This field is available in API v48.0 and later.
`TotalAdjustmentDistTaxAmount`	**Type** currency **Properties** Filter, Sort **Description** Roll-up of all adjustment tax amounts on the order. Used only if the OrderAdjustmentGroup has a Type value of Header. To access Commerce Orders fields, your org must have a Salesforce Order Management license. Commerce Orders fields are available only in Lightning Experience. This field is available in API v48.0 and later.
`TotalAdjustmentDistAmtWithTax`	**Type** currency **Properties** Filter, Sort

Field Name	Details
	Description Roll-up of all adjustment tax amounts on the order, including tax. Used only if the OrderAdjustmentGroup has a Type value of Header. This is a gross tax field. To access Commerce Orders fields, your org must have a Salesforce Order Management license. Commerce Orders fields are available only in Lightning Experience. This field is available in API v49.0 and later.
`TotalAdjustmentTaxAmount`	**Type** currency **Properties** Filter, Sort **Description** Sum of all the order product's tax adjustments. To access Commerce Orders fields, your org must have a Salesforce Order Management license. Commerce Orders fields are available only in Lightning Experience. This field is available in API v48.0 and later.
`TotalAmtWithTax`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Equals `TotalPrice` + `TotalTaxAmount` for the order item. This is a gross tax field. To access Commerce Orders fields, your org must have a Salesforce Order Management license. Commerce Orders fields are available only in Lightning Experience. This field is available in API v49.0 and later.
`TotalLineAdjustmentAmount`	**Type** currency **Properties** Filter, Sort **Description** The sum of line-level adjustments for the order product. To access Commerce Orders fields, your org must have a Salesforce Order Management license. Commerce Orders fields are available only in Lightning Experience.

Field Name	Details
	This field is available in API v48.0 and later.
TotalLineAdjustmentAmtWithTax	**Type** currency **Properties** Filter, Sort **Description** The sum of line-level adjustments for the order product, including tax. This is a gross tax field. To access Commerce Orders fields, your org must have a Salesforce Order Management license. Commerce Orders fields are available only in Lightning Experience. This field is available in API v49.0 and later.
TotalLineAdjustmentTaxAmount	**Type** currency **Properties** Filter, Sort **Description** Total tax amount for adjustments made to the order product. To access Commerce Orders fields, your org must have a Salesforce Order Management license. Commerce Orders fields are available only in Lightning Experience. This field is available in API v48.0 and later.
TotalLineAmount	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** The total price of the order product, before price adjustments, inclusive of quantity. To access Commerce Orders fields, your org must have a Salesforce Order Management license. Commerce Orders fields are available only in Lightning Experience. This field is available in API v48.0 and later.
TotalLineTaxAmount	**Type** currency **Properties** Filter, Sort

Field Name	Details
	Description Total tax amount for this order product, excluding tax on adjustments. To access Commerce Orders fields, your org must have a Salesforce Order Management license. Commerce Orders fields are available only in Lightning Experience. This field is available in API v48.0 and later.
`TotalPrice`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total price for this order product. The calculations for this field's value are different if Commerce Orders is enabled. **Default Value** `TotalPrice` = (`UnitPrice` * `Quantity`) **Commerce Orders** If `TotalLineAmount` is null, (`UnitPrice` * `Quantity`) is sent to `RoundedLineAmount` and rounded. It is then sent to `Total Price`. Otherwise, `TotalLineAmount` is sent to `RoundedLineAmount`, rounded, and then sent to `TotalPrice`. To access Commerce Orders fields, your org must have a Salesforce Order Management license. Commerce Orders fields are available only in Lightning Experience. This field is available in API v48.0 and later.
`TotalTaxAmount`	**Type** currency **Properties** Filter, Sort **Description** Sum of the order product's tax and any adjustments. To access Commerce Orders fields, your org must have a Salesforce Order Management license. Commerce Orders fields are available only in Lightning Experience. This field is available in API v48.0 and later.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update

Field Name	Details
	Description Describes what the order item represents. Possible values are: • `Delivery Charge` — An extra charge made against an order. • `Order Product` — An item that the customer has bought. To access Commerce Orders fields, your org must have a Salesforce Order Management license. Commerce Orders fields are available only in Lightning Experience. This field is available in API v48.0 and later.
`TypeCode`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Code for the order product. Possible values are: • `Charge` • `Product` To access Commerce Orders fields, your org must have a Salesforce Order Management license. Commerce Orders fields are available only in Lightning Experience. This field is available in API v48.0 and later.
`UnitPrice`	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** Unit price for the order product.

Usage

An order can have associated order product records only if the order has a price book associated with it. An order product must correspond to a product that is listed in the order's price book.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

OrderItemFeed (API version 29.0)
Feed tracking is available for the object.

OrderItemHistory
History is available for tracked fields of the object.

SEE ALSO:
Order
OrderItemSummary

OrderItemAdjustmentLineItem

An adjustment that has been made to an order item. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

To access Commerce Orders entities, your org must have a Salesforce Order Management license. Commerce Orders entities are available only in Lightning Experience.

Fields

Field	Details
`Amount`	**Type** currency **Properties** Create, Filter, Sort, Update **Description** The total value of the adjustment line.
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** Users can add a custom description to the record to provide additional detail.
`Name`	**Type** string

Field	Details
	Properties Create, Filter, Group, idLookup, Sort, Update **Description** Name of the adjustment line.
`OrderAdjustmentGroupId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The order adjustment group that contains the order item adjustment line item.
`OrderId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The parent order of the the order item related to the adjustment line.
`OrderItemId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The order item that the adjustment line applies to.
`RelatedAdjustmentLineItemId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The original order item adjustment line. Useful for reference in change order scenarios.
`TotalAmtWithTax`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Equals `TotalPrice + TotalTaxAmount` for the order item adjustment line item. This is a gross tax field.

Field	Details
	To access Commerce Orders fields, your org must have a Salesforce Order Management license. Commerce Orders fields are available only in Lightning Experience. This field is available in API v49.0 and later.
`TotalTaxAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** The total amount of tax applied to the adjustment line.

OrderItemAdjustmentLineSummary

Represents the current properties and state of price adjustments on an OrderItemSummary. Corresponds to one or more order item adjustment line item objects, consisting of an original object and any change objects applicable to it. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is only available in Salesforce Order Management orgs or if the B2B Commerce on Lightning Experience license is enabled.

Fields

Field	Details
`Amount`	**Type** currency **Properties** Filter, Sort **Description** Amount, not including tax, of the OrderItemAdjustmentLineSummary. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.

Field	Details
CurrencyIsoCode	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** ISO code for the currency of the OrderItemSummary to which the adjustment applies. The default value is USD. Possible values are: • DKK—Danish Krone • EUR—Euro • GBP—British Pound • USD—U.S. Dollar This field is available in API version 49.0 and later.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of the OrderItemAdjustmentLineSummary. This field can be edited.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Name of the OrderItemAdjustmentLineSummary.
OrderAdjustmentGroupSummaryId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** If this object belongs to an OrderAdjustmentGroupSummary, this value is the ID of that OrderAdjustmentGroupSummary.
OrderItemSummaryId	**Type** reference **Properties** Filter, Group, Sort

Field	Details
	Description ID of the OrderItemSummary to which the OrderItemAdjustmentLineSummary applies.
`OrderSummaryId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the OrderSummary associated with the OrderItemSummary to which this OrderItemAdjustmentLineSummary applies.
`OriginalOrderItemAdjustmentLineItemId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the original OrderItemAdjustmentLine associated with this summary object. Nillable=true only if the associated order summary is unmanaged. For managed order summaries, nillable=false.
`TotalAmtWithTax`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of the adjustment, inclusive of tax. This amount is equal to Amount + TotalTaxAmount. This field is available in API version 49.0 and later.
`TotalTaxAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Tax on the Amount.

SEE ALSO:

OrderItemAdjustmentLineItem

OrderItemSummary

OrderItemTaxLineItemSummary

OrderItemSummary

Represents the current properties and state of a product or charge on an OrderSummary. Corresponds to one or more order item objects, consisting of an original object and any change objects applicable to it. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is only available in Salesforce Order Management orgs or if the B2B Commerce on Lightning Experience license is enabled.

Fields

Field	Details
`AdjustedLineAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total, including adjustments but not tax, of the OrderItemSummary.
`AdjustedLineAmtWithTax`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total price of the OrderItemSummary, inclusive of adjustments and tax. This amount is equal to AdjustedLineAmount + TotalAdjustedLineTaxAmount. This field is available in API version 49.0 and later.
`CurrencyIsoCode`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** ISO code for the currency of the OrderSummary associated with the OrderItemSummary. The default value is USD. Possible values are: • `DKK`—Danish Krone

Field	Details
	• `EUR`—Euro • `GBP`—British Pound • `USD`—U.S. Dollar This field is available in API version 49.0 and later.
`Description`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of the OrderItemSummary. This field can be edited.
`EndDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** End date of the OrderItemSummary. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.
`GrossUnitPrice`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Unit price, including tax, of the OrderItemSummary. This value is equal to UnitPrice + the amount of tax on the UnitPrice. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field. This field is available in API version 49.0 and later.
`LineNumber`	**Type** int **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The order line number assigned to this OrderItemSummary. For example, if this object is the third in the displayed list of OrderItemSummaries belonging to the OrderSummary, this value is 3. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.
`ListPrice`	**Type** currency **Properties** Filter, Nillable, Sort **Description** List price of the product represented by this OrderItemSummary. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Name of the OrderItemSummary.
`OrderDeliveryGroupSummaryId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the OrderDeliveryGroupSummary to which this object belongs.
`OrderSummaryId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the OrderSummary to which this object belongs.
`OriginalOrderItemId`	**Type** reference

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** ID of the original order item associated with this summary object. Nillable=true only if the associated order summary is unmanaged. For managed order summaries, nillable=false.
`Product2Id`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the product represented by this OrderItemSummary.
`ProductCode`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Product code of the product represented by this OrderItemSummary.
`Quantity`	**Type** double **Properties** Filter, Sort **Description** Current total quantity of products represented by this order item summary. Equal to QuantityOrdered minus (QuantityCanceled and QuantityReturned). If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.
`QuantityAllocated`	**Type** double **Properties** Filter, Sort **Description** Allocated quantity on this order item summary. This quantity is associated with one or more FulfillmentOrderLineItems. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.

Field	Details
QuantityAvailableToCancel	**Type** double **Properties** Filter, Nillable, Sort **Description** Quantity that can still be canceled on this OrderItemSummary. Equal to QuantityOrdered minus (QuantityCanceled and QuantityAllocated). This value duplicates QuantityAvailableToFulfill.
QuantityAvailableToFulfill	**Type** double **Properties** Filter, Nillable, Sort **Description** Quantity available to be fulfilled on this OrderItemSummary. Equal to QuantityOrdered minus (QuantityCanceled and QuantityAllocated). This value duplicates QuantityAvailableToCancel.
QuantityAvailableToReturn	**Type** double **Properties** Filter, Nillable, Sort **Description** Quantity available to be returned on this OrderItemSummary. Equal to QuantityFulfilled minus QuantityReturnInitiated.
QuantityCanceled	**Type** double **Properties** Filter, Sort **Description** Canceled quantity on this OrderItemSummary. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.
QuantityFulfilled	**Type** double **Properties** Filter, Sort **Description** Fulfilled quantity on this OrderItemSummary. This quantity can no longer be canceled.

Field	Details
	If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.
`QuantityNetOrdered`	**Type** double **Properties** Filter, Nillable, Sort **Description** Quantity available to be allocated on this OrderItemSummary. Equal to QuantityOrdered minus QuantityCanceled.
`QuantityOrdered`	**Type** double **Properties** Filter, Sort **Description** Ordered quantity on this OrderItemSummary. It includes the originally ordered quantity plus any quantity added to the order later. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.
`QuantityReturned`	**Type** double **Properties** Filter, Sort **Description** Returned quantity on this OrderItemSummary. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.
`QuantityReturnInitiated`	**Type** double **Properties** Filter, Sort **Description** Quantity returned or pending return on this OrderItemSummary. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.

Field	Details
ReservedAtLocationId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Reserved for future use.
ServiceDate	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Service or start date of the OrderItemSummary. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.
Status	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Status of the OrderItemSummary. The default value is ORDERED. Possible values are: • `ALLOCATED`—Allocated • `CANCELED`—Canceled • `FULFILLED`—Fulfilled • `ORDERED`—Ordered • `PAID`—Paid • `PARTIALLYALLOCATED`—Partially Allocated • `PARTIALLYFULFILLED`—Partially Fulfilled • `RESHIPPED`—Reshipped • `RETURNED`—Returned
StockKeepingUnit	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The stock keeping unit (SKU) of the Product2 associated with the OrderItemSummary..

Field	Details
	This field is available in API version 49.0 and later.
TotalAdjustedLineTaxAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Tax on the AdjustedLineAmount.
TotalAdjustmentAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total of all price adjustments applied to this OrderItemSummary.
TotalAdjustmentAmtWithTax	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of all price adjustments applied to this OrderItemSummary, inclusive of tax. This amount is equal to TotalAdjustmentAmount + TotalAdjustmentTaxAmount. This field is available in API version 49.0 and later.
TotalAdjustmentDistAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total of all order-level price adjustments applied to this OrderItemSummary. This value includes OrderItemAdjustmentLineSummaries that belong to OrderAdjustmentGroupSummaries of type Header.
TotalAdjustmentDistAmtWithTax	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of the order-level price adjustments applied to this OrderItemSummary, inclusive of tax. This amount is equal to TotalAdjustmentDistAmount + TotalAdjustmentDistTaxAmount.

Field	Details
	This field is available in API version 49.0 and later.
TotalAdjustmentDistTaxAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Tax on the TotalAdjustmentDistAmount.
TotalAdjustmentTaxAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Tax on the TotalAdjustmentAmount.
TotalAmtWithTax	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total price of the OrderItemSummary, inclusive of tax. This amount is equal to TotalPrice + TotalTaxAmount. This field is available in API version 49.0 and later.
TotalLineAdjustmentAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total of all non-order-level price adjustments applied to this OrderItemSummary. This value includes OrderItemAdjustmentLineSummaries that don't belong to an OrderAdjustmentGroupSummary, or that belong to an OrderAdjustmentGroupSummary of type SplitLine.
TotalLineAdjustmentAmtWithTax	**Type** currency **Properties** Filter, Nillable, Sort

Field	Details
	Description Total of all non-order-level price adjustments applied to this OrderItemSummary, inclusive of tax. This amount is equal to TotalLineAdjustmentAmount + TotalLineAdjustmentTaxAmount. This field is available in API version 49.0 and later.
`TotalLineAdjustmentTaxAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Tax on the TotalLineAdjustmentAmount.
`TotalLineAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total, not including adjustments or tax, of the OrderItemSummary. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.
`TotalLineAmountWithTax`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total unadjusted amount of the OrderItemSummary, inclusive of tax. This amount is equal to TotalLineAmount + TotalLineTaxAmount. This field is available in API version 49.0 and later.
`TotalLineTaxAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Tax on the TotalLineAmount.
`TotalPrice`	**Type** currency

Field	Details
	Properties Filter, Nillable, Sort **Description** Total, including adjustments but not tax, of the OrderItemSummary.
`TotalTaxAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Tax on the TotalPrice.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Type of the OrderItemSummary. Delivery Charge indicates that the OrderItemSummary represents a delivery charge. Order Product indicates that it represents any other type of product, service, or charge. Each type corresponds to one type code, shown here in parentheses. Possible values are: • `Delivery Charge (Charge)` • `Order Product (Product)` If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.
`TypeCode`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Type code of the OrderItemSummary. Charge indicates that the OrderItemSummary represents a delivery charge. Product indicates that it represents any other type of product, service, or charge. Possible values are: • `Charge` • `Product`

Field	Details
	If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.
`UnitPrice`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Unit price of the product represented by the OrderItemSummary. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.

SEE ALSO:
FulfillmentOrderLineItem
OrderItem
OrderItemAdjustmentLineSummary
OrderItemTaxLineItemSummary
OrderSummary

OrderItemSummaryChange

Represents a change to an OrderItemSummary, usually a reduction in quantity due to a cancel or return. Corresponds to a change order item. This object is available in API version 48.0 and later.

This object is used for calculations and doesn't have a default record page.

Supported Calls

`delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

This object is only available in Salesforce Order Management orgs.

Fields

Field	Details
`ChangeOrderItemId`	**Type** reference

Field	Details
	Properties Filter, Group, Sort **Description** ID of the associated change order item.
ChangeType	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Type of change represented by the OrderItemSummaryChange. Possible values are: • Cancel • DeliveryChargeAdjustment • ProductAdjustment • Return
CurrencyIsoCode	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** ISO code for the currency of the OrderSummary associated with the OrderItemSummaryChange. The default value is USD. Possible values are: • DKK—Danish Krone • EUR—Euro • GBP—British Pound • USD—U.S. Dollar This field is available in API version 49.0 and later.
IsPreFulfillment	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the change occurs before the OrderItemSummary has been fulfilled.
OrderItemSummaryChangeNumber	**Type** string

Field	Details
	Properties Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** ID of the OrderItemSummaryChange.
`OrderItemSummaryId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the OrderItemSummary to which the change applies.
`OrderSummaryId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the OrderSummary to which the associated OrderItemSummary belongs.
`Reason`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Sort **Description** Reason for the change. You can customize this list. The list has one default value: • `Unknown`

SEE ALSO:
OrderItem
OrderItemSummary

OrderItemTaxLineItem

The tax amount that has been applied to an order item. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

To access Commerce Orders entities, your org must have a Salesforce Order Management license. Commerce Orders entities are available only in Lightning Experience.

Fields

Field	Details
Amount	**Type** currency **Properties** Create, Filter, Sort, Update **Description** The total amount of the tax line.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** Users can add a custom description to the record to provide additional detail.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Name of the tax line.
OrderId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the parent order for the order item related to the tax line
OrderItemAdjustmentLineItemId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The order item adjustment line item that the tax line applies to.

Field	Details
OrderItemId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The order item that the tax line applies to.
Rate	**Type** percent **Properties** Create, Filter, Nillable, Sort, Update **Description** The percentage value of the tax. Null if the tax is a flat amount.
RelatedTaxLineItemId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The original order item tax line. Useful for reference in change order scenarios.
TaxEffectiveDate	**Type** date **Properties** Create, Filter, Group, Sort, Update **Description** The date used to calculate the effective tax rate.
Type	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Shows whether the amount on the tax line is an estimate or the final calculated amount. Doesn’t set a value by default. Users can define automation to set and change the value as needed. Possible values are: • Actual • Estimated

OrderItemTaxLineItemSummary

Represents the current tax on an OrderItemSummary or OrderItemAdjustmentLineSummary. Corresponds to one or more order item tax line items, consisting of an original object and any change objects applicable to it. This object is available in API version 48.0 and later.

Supported Calls

`delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`

Special Access Rules

This object is only available in Salesforce Order Management orgs or if the B2B Commerce on Lightning Experience license is enabled.

Fields

Field	Details
`Amount`	**Type** currency **Properties** Filter, Sort **Description** Amount of tax represented by the OrderItemTaxLineItemSummary. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.
`CurrencyIsoCode`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** ISO code for the currency of the OrderSummary associated with the OrderItemTaxLineItemSummary. The default value is USD. Possible values are: • `DKK`—Danish Krone • `EUR`—Euro • `GBP`—British Pound • `USD`—U.S. Dollar This field is available in API version 49.0 and later.

Field	Details
Description	**Type** textarea **Properties** Nillable, Update **Description** Description of the OrderItemTaxLineItemSummary. This field can be edited.
Name	**Type** string **Properties** Filter, Group, idLookup, Sort, Update **Description** Name of the OrderItemTaxLineItemSummary.
OrderItemAdjustmentLineSummaryId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** If this object represents tax on an adjustment, this value is the ID of the OrderItemAdjustmentLineSummary to which the tax applies. If this value is null, the adjustment applies to an OrderItemSummary.
OrderItemSummaryId	**Type** reference **Properties** Filter, Group, Sort **Description** If this object represents tax on an OrderItemSummary, this value is the ID of that OrderItemSummary. If this object represents tax on an adjustment, this value is the ID of the OrderItemSummary to which the adjustment applies.
OrderSummaryId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the OrderSummary that the associated OrderItemSummary or OrderItemAdjustmentLineSummary belongs to.

Field	Details
OriginalOrderItemTaxLineItemId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the original order item tax line item associated with this summary object. Nillable=true only if the associated order summary is unmanaged. For managed order summaries, nillable=false.
Rate	**Type** percent **Properties** Filter, Nillable, Sort **Description** Tax rate used to calculate the Amount. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.
TaxEffectiveDate	**Type** date **Properties** Filter, Group, Sort **Description** Date on which the Amount was calculated. Important due to tax rate changes over time. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.
Type	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Indicates whether the Amount is actual or estimated. Possible values are: • `Actual` • `Estimated`

Field	Details
	If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.

SEE ALSO:

- FulfillmentOrderItemTax
- OrderItemAdjustmentLineSummary
- OrderItemSummary
- OrderItemTaxLineItem

OrderItemType

Shows whether the order product is a product line or charge line. This object is available in API version 48.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`ApiName`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** Uniquely identifies a picklist value so it can be retrieved without using an id or primary label.
`IsDefault`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this is the default order item type status value (`true`) or not (`false`) in the picklist.
`MasterLabel`	**Type** string

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** Master label for this order item type status value. This display value is the internal label that doesn't get translated.
`SortOrder`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Number used to sort this value in the order item status picklist. These numbers aren't guaranteed to be sequential, as some previous contract status values might have been deleted.
`TypeCode`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Code indicating the type of order item. Possible values are: • `Charge`—API Name DeliveryCharge. • `Product`—For API Name Product.

OrderOwnerSharingRule

Represents a rule which determines order sharing access for the order's owners.

Note: To enable access to this object for your org, contact Salesforce customer support. However, we recommend that you instead use Metadata API to programmatically update owner sharing rules because it triggers automatic sharing rule recalculation. The SharingRules Metadata API type is enabled for all orgs.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
CreatedById	**Type** reference **Properties** Defaulted on create, Filter, Group, Sort **Description** ID of the creator of the order owner sharing rule.
CreatedDate	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date when the order owner sharing rule was created.
Description	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the order owner sharing rule. Maximum length is 1,000 characters.
DeveloperName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Name of the developer of the order owner sharing rule.
GroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the group whose orders are shared.
Id	**Type** ID **Properties** Defaulted on create, Filter, Group, idLookup, Sort

Field	Details
	Description ID of the order owner sharing rule.
LastModifiedById	**Type** reference **Properties** Defaulted on create, Filter, Group, Sort **Description** ID of the user who last modified the order owner sharing rule.
LastModifiedDate	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date when the order owner sharing rule was last modified.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Namefield, Sort, Update **Description** Name of the order owner sharing rule. Maximum length is 80 characters.
OrderAccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Access level for the order owner sharing rule.
SystemModstamp	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** System modification time for the order owner sharing rule.
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort

Field	Details
	Description ID of the user or group with whom order access is shared.

Usage

Use this object to manage the sharing rules for orders. For example, the following code creates an order owner sharing rule between two public groups, which can also contain portal users.

```
OrderOwnerSharingRule rule = new OrderOwnerSharingRule();
rule.setName("RuleName"); // Set the sharing rule name
rule.setDeveloperName("RuleDeveloperName"); // Set the sharing rule developer name
rule.setGroupId("00Gx00000000000"); // Set the group of users to share records from
rule.setUserOrGroupId("00Gx00000000001"); // Set the group of users to share records to
rule.setOrderAccessLevel("Edit");
connection.create(rule);
```

SEE ALSO:

Metadata API Developer Guide: SharingRules

OrderPaymentSummary

Represents the current properties and state of payments using a single payment method that are applied to one OrderSummary. This object is available in API version 48.0 and later.

Unlike most summary objects, an OrderPaymentSummary is not related to a similarly named order payment object. Instead, it combines values from multiple payment objects that use the same payment method and apply to the same OrderSummary.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is only available in Salesforce Order Management orgs or if the B2B Commerce on Lightning Experience license is enabled.

Fields

Field	Details
`AuthorizationAmount`	**Type** currency **Properties** Filter, Nillable, Sort

Field	Details
	Description Amount of the OrderPaymentSummary that has been authorized.
AuthorizationReversal Amount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Amount of the AuthorizationAmount that has been reversed.
AvailableToCaptureAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Amount of the OrderPaymentSummary that is available to be captured. Equal to AuthorizationAmount minus (CapturedAmount and PendingCaptureAmount and PendingReverseAuthAmount).
AvailableToRefundAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Amount of the OrderPaymentSummary that is available to be refunded. Equal to CapturedAmount minus (RefundedAmount and PendingCaptureAmount and PendingRefundAmount).
BalanceAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total balance of all payments associated with this summary object.
CapturedAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Amount of the OrderPaymentSummary that has been captured.

Field	Details
CurrencyIsoCode	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only for orgs with the multicurrency feature enabled. Contains the ISO code for the currency of the OrderSummary associated with the OrderPaymentSummary. Order Management APIs and actions that create an OrderPaymentSummary for an OrderSummary set this value. The default value is USD. Possible values are: • DKK—Danish Krone • EUR—Euro • GBP—British Pound • USD—U.S. Dollar This field is available in API version 49.0 and later.
FullName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The full name of the payment method user.
LastPaymentGatewayLogId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the most recent payment gateway log associated with the OrderPaymentSummary.
LastPaymentGatewayMessage	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** The most recent message received from the payment gateway associated with the OrderPaymentSummary.
LastReferencedDate	**Type** dateTime

Field	Details
	Properties Filter, Nillable, Sort **Description** Timestamp for when the current user last viewed a record related to this record. This field is available in API version 49.0 and later.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Timestamp for when the current user last viewed this record. A null value can mean that this record has only been referenced (LastReferencedDate) and not viewed. This field is available in API version 49.0 and later.
`Method`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Name of the OrderPaymentSummary.
`OrderSummaryId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the OrderSummary associated with the OrderPaymentSummary.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the user who currently owns this OrderPaymentSummary. Default value is the user logged in to the API to perform the create.
`PaymentMethodId`	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description ID of the payment method associated with this OrderPaymentSummary.
PendingAuthorizationAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Amount of the OrderPaymentSummary that is pending authorization.
PendingCaptureAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Amount of the OrderPaymentSummary that is pending capture.
PendingRefundAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Amount of the OrderPaymentSummary that is pending refund.
PendingReverseAuthAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Amount of the AuthorizationAmount that is pending reversal.
RefundedAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Amount of the OrderPaymentSummary that has been refunded.
Type	**Type** string **Properties** Filter, Group, Sort

Field	Details
	Description The payment method type associated with the OrderPaymentSummary. For example, `visa`, `mastercard`, `check`, or `giftcard`.

SEE ALSO:

OrderSummary

Payment

PaymentAuthorization

PaymentMethod

OrderShare

Represents a sharing entry on an Order. This object is available in API version 48.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`OrderAccessLevel`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Level of access that the user or group has to the order. Possible values are: • `All`—Owner. This value isn’t valid when creating, updating, or deleting records. • `Edit`—Read/Write • `Read`—Read Only
`OrderId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the order associated with this sharing entry. This field can't be updated.

Field	Details
RowCause	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The reason that the user has access to the order.
UserOrGroupId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user or group that has been given access to the order. This field can't be updated.

Usage

This object allows you to determine which users and groups can view or edit orders owned by other users.

If you attempt to create a record that matches an existing record, any modified fields are updated, the system returns the existing record.

OrderStatus

Represents the status of the order entity. This object is available in API version 48.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
ApiName	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** Uniquely identifies a picklist value so it can be retrieved without using an id or primary label.
IsDefault	**Type** boolean

Field	Details
	Properties Defaulted on create, Filter, Group, Sort **Description** Indicates whether this is the default order status value `(true)` or not `(false)` in the picklist.
`MasterLabel`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Master label for this order status value. This display value is the internal label that doesn't get translated.
`SortOrder`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Number used to sort this value in the order status picklist. These numbers aren't guaranteed to be sequential, as some previous contract status values might have been deleted.
`StatusCode`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Status of the order. Possible values are: • `Activated` • `Draft`

Usage

This object represents a value in the order status picklist. The order status picklist provides additional information about the status of an Order, such as its current state (`Draft` or `Activated`). You can query these records to retrieve the set of values in the order status picklist, and then use that information while processing Order objects to determine more information about a given order. For example, the application could test whether a given order is activated based on its Status value and the value of the StatusCode property in the associated OrderStatus object.

OrderSummary

Represents the current properties and state of an order. Corresponds to one or more order objects, consisting of an original object and any change objects applicable to it. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is only available in Salesforce Order Management orgs or if the B2B Commerce on Lightning Experience license is enabled.

Fields

Field	Details
`AccountId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the account or person account associated with the OrderSummary. It represents the shopper in the storefront. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.
`ActiveProcessExceptionCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Total number of active process exceptions on the OrderSummary. This field is available in API version 50.0 and later.
`BillingAddress`	**Type** address **Properties** Filter, Nillable **Description** Billing address associated with the OrderSummary.

Field	Details
	If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.
`BillingCity`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Billing address city.
`BillingCountry`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Billing address country.
`BillingEmailAddress`	**Type** email **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Email address on the billing address.
`BillingGeocodeAccuracy`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The accuracy of the geocode for the billing address. Possible values are: • `Address` • `Block` • `City` • `County` • `ExtendedZip` • `NearAddress` • `Neighborhood` • `State` • `Street`

Field	Details
	• `Unknown` • `Zip`
`BillingLatitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with BillingLongitude to specify the precise geolocation of the billing address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
`BillingLongitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with BillingLatitude to specify the precise geolocation of the billing address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
`BillingPhoneNumber`	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Phone number of the billing address.
`BillingPostalCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Billing address postal code.
`BillingState`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Billing address state.
`BillingStreet`	**Type** textarea

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** Billing address street.
`BillToContactId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the Contact associated with the OrderSummary. It represents the shopper in the storefront when not using person accounts. If the `OrderLifeCycleType` field is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field. This field is available in API version 49.0 and later.
`ChangeOrderId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Reserved for future use.
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only for orgs with the multicurrency feature enabled. Contains the ISO code for the currency of the original Order associated with the OrderSummary. The default value is USD. Possible values are: • `DKK`—Danish Krone • `EUR`—Euro • `GBP`—British Pound • `USD`—U.S. Dollar This field is available in API version 49.0 and later.
`Description`	**Type** textarea

Field	Details
	Properties Create, Nillable, Update **Description** Description of the OrderSummary. This field can be edited.
GrandTotalAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount, including adjustments and tax, of the OrderSummary.
IsSuspended	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the OrderSummary is suspended. The default value is false. This field is available in API version 50.0 and later.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. A null value can mean that this record has only been referenced (LastReferencedDate) and not viewed.
OrderedDate	**Type** dateTime **Properties** Filter, Nillable, Sort

Field	Details
	Description Date of the original order associated with this OrderSummary. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.
`OrderLifeCycleType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Specifies whether the OrderSummary is managed by Salesforce Order Management (MANAGED) or by an external system (UNMANAGED). An unmanaged OrderSummary is stored in Salesforce for reference purposes. • Some Order Management APIs reject input records that are associated with unmanaged OrderSummaries. • Order Management does not update financial bucket fields on some records that are associated with unmanaged OrderSummaries. • A user with the EditUnmanagedOrderSummaries or B2BCommerceIntegrator permission can edit certain fields on objects related to unmanaged OrderSummaries that are normally only accessible via APIs. Possible values are: • `MANAGED`—Managed • `UNMANAGED`—Unmanaged This field is available in API version 49.0 and later.
`OrderNumber`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Name of the OrderSummary.
`OriginalOrderId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the original order associated with this OrderSummary.

Field	Details
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the user who currently owns this OrderSummary. Default value is the user logged in to the API to perform the create.
PoNumber	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Purchase order number associated with this OrderSummary. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.
RoutingAttempts	**Type** int **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The number of attempts that have been made to route the order summary to inventory locations. This field is available in API version 51.0 and later.
SalesChannelId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the SalesChannel associated with this OrderSummary. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field.
SalesStoreId	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description ID of the RetailStore or WebStore associated with this OrderSummary. If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field. This field is only available in Salesforce B2B Commerce orgs.
`Status`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** Status of the order summary. Unlike the Status and Status Category fields on the order and FulfillmentOrder objects, this field is optional. We recommend that you use the same values in this picklist that you use in the Status picklist for the order object.
`TaxLocaleType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The system used to handle tax on the original Order associated with the OrderSummary. Gross usually applies to taxes like value-added tax (VAT), and Net usually applies to taxes like sales tax. Possible values are: • `Gross` (displays most prices and taxes as combined values) • `Net` (displays most prices and taxes as separate values) If the `OrderLifeCycleType` field on the associated OrderSummary is set to UNMANAGED, then users with the Edit Unmanaged Order Summaries or B2B Commerce Integrator user permission can modify this field. This field is available in API version 49.0 and later.
`TotalAdjDeliveryAmtWithTax`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of all OrderItemSummaries of type code Charge belonging to this OrderSummary, inclusive of adjustments and tax. This amount is equal to TotalAdjustedDeliveryAmount + TotalAdjustedDeliveryTaxAmount.

Field	Details
	This field is available in API version 49.0 and later.
`TotalAdjDistAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total of distributed adjustments applied to OrderItemSummaries belonging to this OrderSummary. This amount is equal to TotalProductAdjDistAmount plus TotalDeliveryAdjDistAmount.
`TotalAdjDistAmountWithTax`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total of distributed adjustments applied to OrderItemSummaries belonging to this OrderSummary, inclusive of tax. This amount is equal to TotalAdjDistAmount plus TotalAdjDistTaxAmount. This field is available in API version 49.0 and later.
`TotalAdjDistTaxAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Tax on the TotalAdjDistAmount.
`TotalAdjProductAmtWithTax`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of all OrderItemSummaries of type code Product belonging to this OrderSummary, inclusive of adjustments and tax. This amount is equal to TotalAdjustedProductAmount plus TotalAdjustedProductTaxAmount. This field is available in API version 49.0 and later.
`TotalAdjustedDeliveryAmount`	**Type** currency **Properties** Filter, Nillable, Sort

Field	Details
	Description Total, including adjustments but not tax, of all OrderItemSummaries of type code Charge belonging to this OrderSummary.
`TotalAdjustedDeliveryTaxAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Tax on the TotalAdjustedDeliveryAmount.
`TotalAdjustedProductAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total, including adjustments but not tax, of all OrderItemSummaries of type code Product belonging to this OrderSummary.
`TotalAdjustedProductTaxAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Tax on the TotalAdjustedProductAmount.
`TotalAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total, including adjustments but not tax, of all OrderItemSummaries belonging to this OrderSummary. Equal to TotalAdjustedProductAmount plus TotalAdjustedDeliveryAmount.
`TotalDeliveryAdjDistAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total of all order-level price adjustments applied to OrderItemSummaries of type code Charge belonging to this OrderSummary. This value includes OrderItemAdjustmentLineSummaries that belong to OrderAdjustmentGroupSummaries of type Header.

Field	Details
TotalDeliveryAdjDistAmtWithTax	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total of all order-level price adjustments applied to OrderItemSummaries of type code Charge belonging to this OrderSummary, inclusive of tax. This value includes OrderItemAdjustmentLineSummaries that belong to OrderAdjustmentGroupSummaries of type Header. It is equal to TotalDeliveryAdjDistAmount + TotalDeliveryAdjDistTaxAmount. This field is available in API version 49.0 and later.
TotalDeliveryAdjDistTaxAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Tax on the TotalDeliveryAdjDistAmount.
TotalProductAdjDistAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total of all order-level price adjustments applied to OrderItemSummaries of type code Product belonging to this OrderSummary. This value includes OrderItemAdjustmentLineSummaries that belong to OrderAdjustmentGroupSummaries of type Header.
TotalProductAdjDistAmtWithTax	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total of all order-level price adjustments applied to OrderItemSummaries of type code Product belonging to this OrderSummary, inclusive of tax. This value includes OrderItemAdjustmentLineSummaries that belong to OrderAdjustmentGroupSummaries of type Header. It is equal to TotalProductAdjDistAmount + TotalProductAdjDistTaxAmount. This field is available in API version 49.0 and later.
TotalProductAdjDistTaxAmount	**Type** currency

Field	Details
	Properties Filter, Nillable, Sort **Description** Tax on the TotalProductAdjDistAmount.
`TotalTaxAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total tax on all OrderItemSummaries belonging to this OrderSummary. Equal to TotalAdjustedDeliveryTaxAmount plus TotalAdjustedProductTaxAmount.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

OrderSummaryFeed
Feed tracking is available for the object.

OrderSummaryOwnerSharingRule
Sharing rules are available for the object.

OrderSummaryShare
Sharing is available for the object.

SEE ALSO:

- FulfillmentOrder
- Order
- OrderItemSummary
- OrderPaymentSummary
- OrderSummaryRoutingSchedule
- SalesChannel

OrderSummaryRoutingSchedule

Represents an attempt to route an order summary to one or more inventory locations for fulfillment. You can use it to schedule future attempts and to record completed attempts. This object is available in API version 51.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is only available in Salesforce Order Management orgs or if the B2B Commerce on Lightning Experience license is enabled.

Fields

Field	Details
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, it’s possible that this record was referenced (`LastReferencedDate`) and not viewed.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the order summary routing schedule.
`OrderSummaryId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** (Master-Detail) The order summary associated with the routing schedule.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the User who currently owns this order summary routing schedule. Default value is the User logged in to the API to perform the create.

Field	Details
Reason	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Reason for the routing attempt. You can customize this list. The list has one default value: • `Unknown`
ScheduleStatus	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Identifies whether this routing attempt has already run or is scheduled to run. Possible values are: • ABANDONED • COMPLETED • SCHEDULED
ScheduledDatetime	**Type** dateTime **Properties** Create, Filter, Sort, Update **Description** Identifies when this routing attempt was run or is scheduled to run. If the `ScheduleStatus` is ABANDONED or COMPLETED, then you can't modify this value.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

OrderSummaryRoutingScheduleOwnerSharingRule
Sharing rules are available for the object.

OrderSummaryRoutingScheduleShare
Sharing is available for the object.

SEE ALSO:

OrderSummary

Organization

Represents key configuration information for an organization.

Executing a SOQL SELECT query returns the value of fields in this object, but no value is visible for some of the fields.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`Address` (beta)	**Type** address **Properties** Filter, Nillable **Description** The compound form of the address. Read-only. See Address Compound Fields for details on compound address fields.
`AllowsSelfServiceLogin`	**Type** boolean **Properties** Defaulted on create, Filter, Update **Description** Indicates whether the organization allows Self-Service login (`true`) or not (`false`).
`City`	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** Name of the city for the organization's address.
`ComplianceBccEmail`	**Type** email

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** Email address for compliance blind carbon copies. Limit: 80 characters.
Country	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of the country for the organization's address. Limit: 80 characters.
CountryCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO country code for the organization's address.
DailyWebToCaseCount	**Type** int **Properties** Filter, Nillable **Description** The number of web form submissions that have been converted to cases for the day.
DailyWebToCaseLimit	**Type** int **Properties** Filter, Nillable **Description** The maximum number of web form submissions that can be converted to cases per day.
DailyWebToLeadCount	**Type** int **Properties** Filter, Nillable

Field	Details
	Description The number of web form submission that have been converted to leads for the day
DailyWebToLeadLimit	**Type** int **Properties** Filter, Nillable **Description** The maximum number of web form submissions that can be converted to leads per day.
DefaultAccountAccess	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** In API version 10.0 and later, represents the default access level for accounts, contracts, and assets. The possible values are: • None • Read • Edit • ControlledByLeadOrContact • ControlledByCampaign In versions before 10.0, DefaultAccountAndContactAccess represented this value.
DefaultAccountAndContactAccess	**Type** picklist **Properties** Filter, Nillable, Restricted picklist **Description** Default access level for accounts, contacts, contracts, and assets. This field is supported for backward compatibility only and is not available in API version 10.0 or later. In version 10.0 and later, use either DefaultAccountAccess or DefaultContactAccess.
DefaultCalendarAccess	**Type** picklist

Field	Details
	Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Default access level for calendars. The possible values are listed, followed by the user interface labels in parentheses: • `HideDetails` (Hide Details) • `HideDetailsInsert` (Hide Details and Add Events) • `ShowDetails` (Show Details) • `ShowDetailsInsert` (Show Details and Add Events) • `AllowEdits` (Full Access)
`DefaultCampaignAccess`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Default access level for campaigns. The possible values are: • `None` • `Read` • `Edit` • `All`
`DefaultCaseAccess`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Default access level for cases. The possible values are: • `None` • `Read` • `Edit` • `ReadEditTransfer`
`DefaultContactAccess`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Default access level for contacts. The possible values are: • `None`

Field	Details
	• `Read` • `Edit` • `ControlledByParent` In versions before 10.0, `DefaultAccountAndContactAccess` represented this value. Note: When `DefaultContactAccess` is set to "Controlled by Parent," you can't update the `ContactAccessLevel` field.
`DefaultLeadAccess`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Default access level for leads. The possible values are: • `NoneRead` • `Edit` • `ReadEditTransfer`
`DefaultLocaleSidKey`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort, Update **Description** Default locale SID key.
`DefaultOpportunityAccess`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Default access level for opportunities. The possible values are: • `None` • `Read` • `Edit` • `ControlledByLeadOrContact` • `ControlledByCampaign`

Field	Details
DefaultPricebookAccess	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Default access level for price books. The possible values are listed, followed by the user interface labels in parentheses: • None (No access) • Read (Read only) • ReadSelect (Use)
DefaultTerritoryAccountAccess	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** Default access level for accounts in territories. The possible values are: • Read • Edit • All
DefaultTerritoryCaseAccess	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** Default access level for cases associated with accounts in territories. The possible values are: • None • Read • Edit • ControlledByLeadOrContact • ControlledByCampaign
DefaultTerritoryContactAccess	**Type** picklist **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description Default access level for contacts associated with accounts in territories. The possible values are: • `NoneRead` • `Edit` • `ControlledByLeadOrContact` • `ControlledByCampaign` Note: When `DefaultContactAccess` is set to "Controlled by Parent" you can't update this field.
`DefaultTerritoryOppAccess`	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** Default access level for opportunities in territories. Valid values: • `NoneRead` • `Edit` • `ControlledByLeadOrContact` • `ControlledByCampaign`
`Division`	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** The name of the division for this organization. This field is not related to the Division object.
`Fax`	**Type** phone **Properties** Filter, Group, Nillable, Sort, Update **Description** Fax number. Limit: 40 characters.
`FiscalYearStartMonth`	**Type** int

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** Number that corresponds to the month that this organization's fiscal year starts.
HomepageHtml	**Type** textarea **Properties** Nillable, Update **Description** The Home tab custom links and company message for this organization.
InstanceName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Read-only. The name of the instance. Available in API version 31.0 or later.
IsSandbox	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Read-only. Indicates whether the current organization is a sandbox (`true`) or production (`false`) instance. Available in API version 31.0 or later.
LanguageLocaleKey	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort, Update **Description** The same as `Language`, the two-to-five character code which represents the language and locale ISO code. This controls the language for labels displayed in an application.
LastWebToCaseDate	**Type** dateTime

Field	Details
	Properties Filter, Nillable **Description** The last date that a web form submission was converted to a case.
`LastWebToLeadDate`	**Type** dateTime **Properties** Filter, Nillable **Description** The last date that a web form submission was converted to a lead.
`Latitude`	**Type** double **Properties** Filter, Nillable, Sort, Update **Description** Used with `Longitude` to specify the precise geolocation of an address. Acceptable values are numbers between –90 and 90 up to 15 decimal places. For details on geolocation compound fields, see Compound Field Considerations and Limitations.
`Longitude`	**Type** double **Properties** Filter, Nillable, Sort, Update **Description** Used with `Latitude` to specify the precise geolocation of an address. Acceptable values are numbers between –180 and 180 up to 15 decimal places. For details on geolocation compound fields, see Compound Field Considerations and Limitations.
`MaxActionsPerRule`	**Type** int **Properties** Filter, Nillable **Description** Maximum number of actions per workflow, assignment, escalation, and auto-response rules. This field is unavailable in version 15.0 and later.

Field	Details
MaxRulesPerEntity	**Type** int **Properties** Filter, Nillable **Description** Maximum number of rules per object, inclusive of workflow, assignment, escalation, and auto-response rules. This field is unavailable in version 15.0 and later.
MonthlyPageViewsEntitlement	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of page views allowed for the current calendar month for the sites in your organization. To access this field, Salesforce Sites must be enabled for your organization. This field is generally available in API versions 18.0 and later.
MonthlyPageViewsUsed	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of page views used in the current calendar month for the sites in your organization. To access this field, Salesforce Sites must be enabled for your organization. This field is generally available in API versions 18.0 and later.
Name	**Type** string **Properties** Filter, Group, idLookup, Sort, Update **Description** The name of the organization.
NamespacePrefix	**Type** string **Properties** Filter, Group, idLookup, Nillable, Sort

Field	Details
	Description The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
OrganizationType	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Edition of the organization, for example Enterprise Edition or Unlimited Edition.
Phone	**Type** phone **Properties** Filter, Group, Nillable, Sort, Update **Description** Phone number for the organization.
PostalCode	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** Postal code for the address of the organization. Limit: 20 characters.
PreferencesAutoSelectIndividualOnMerge	**Type** boolean

Field	Details
	Properties Filter, Update
`PreferencesEventScheduler`	**Type** boolean **Properties** Update **Description** Indicates whether opportunities require products (`true`) or not (`false`).
`PreferencesRequireOpportunityProducts`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether opportunities require products (`true`) or not (`false`).
`PreferencesS1BrowserEnabled`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the Salesforce mobile web is enabled for all users in your organization (`true`) or is disabled for all users (`false`). This field is available in API version 29.0 or later.
`PreferencesTerminateOldestSession`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the oldest login session is automatically closed when a policy specifying the maximum number of sessions is triggered. This field is available in API version 35.0 or later. Note: As of API version 50.0, this field is removed.
`PreferencesTransactionSecurityPolicy`	**Type** boolean

Field	Details
	Properties Filter, Update **Description** Indicates whether the Transaction Security feature has been enabled. This field is available in API version 35.0 or later. Note: As of API version 50.0, this field is removed.
`PrimaryContact`	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** Name of the primary contact for the organization. Limit: 80 characters.
`ReceivesAdminInfoEmails`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the organization receives administrator emails (`true`) or not (`false`).
`ReceivesInfoEmails`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the organization receives informational email from Salesforce (`true`) or not (`false`).
`SelfServiceCasePlural`	**Type** string **Properties** Filter, Nillable, Update **Description** The plural version of the term used to represent the Case object in the Self-Service portal.
`SelfServiceCaseSingle`	**Type** string

Field	Details
	Properties Filter, Nillable, Update **Description** The singular version of the term used to represent the Case object in the Self-Service portal.
`SelfServiceCaseSubmitRecordTypeId`	**Type** reference **Properties** Filter, Nillable, Update **Description** The ID of the record type associated with a case submitted via the Self-Service portal.
`SelfServicDefaultCaseOrigin`	**Type** string **Properties** Filter, Nillable, Update **Description** The default origin of a case submitted via the Self-Service portal.
`SelfServiceEmailSenderAddress`	**Type** email **Properties** Filter, Nillable, Update **Description** The Self-Service email address from which new Self-Service user and password email messages are sent, such as `support@acme.com`.
`SelfServiceEmailSenderName`	**Type** string **Properties** Filter, Nillable, Update **Description** The name associated with the email address in the `SelfServiceEmailSenderAddress` field, such as `Acme Customer Support`.
`SelfServiceEmailUserOnCaseCreationTemplateId`	**Type** reference **Properties** Filter, Nillable, Update

Field	Details
	Description The ID of the email template used when email is sent to a Self-Service user when he or she creates a case.
`SelfServiceEnabledForResponseRules`	**Type** boolean **Properties** Filter, Nillable, Update **Description** Indicates whether the Self-Service portal is enabled for auto-response rules (`true`) or not (`false`).
`SelfServiceFeatureConfig`	**Type** int **Properties** Filter, Nillable, Update **Description** An integer representing the active Self-Service feature configuration for this organization.
`SelfServiceLogoutUrl`	**Type** url **Properties** Filter, Nillable, Update **Description** The Web page that displays when a Self-Service user logs out of the Self-Service portal.
`SelfServiceMaxNumSuggestions`	**Type** int **Properties** Filter, Nillable, Update **Description** The maximum number of suggested solutions allowed for a Self-Service case.
`SelfServiceNewCommentCheckedByDefault`	**Type** boolean **Properties** Defaulted on create, Filter, Update

Field	Details
	Description If `true`, When a customer notification is automatically sent when a new comment is added to a case.
`SelfServiceNewCommentTemplateId`	**Type** reference **Properties** Filter, Nillable, Update **Description** The ID of the email template used to send a notification to Self-Service users when a public comment is added to one of their cases.
`SelfServiceNewPassTemplateId`	**Type** reference **Properties** Filter, Nillable, Update **Description** The ID of the email template used when new passwords are generated for Self-Service users.
`SelfServiceNewUserTemplateId`	**Type** reference **Properties** Filter, Nillable, Update **Description** The ID of the email template used when new Self-Service users are enabled.
`SelfServicePageHeight`	**Type** int **Properties** Filter, Nillable, Update **Description** The maximum height in pixels of Self-Service pages.
`SelfServicePageWidth`	**Type** int **Properties** Filter, Nillable, Update **Description** The maximum width in pixels of Self-Service pages.

Field	Details
SelfServiceSelfClosedCaseStatus	**Type** picklist **Properties** Filter, Nillable, Update **Description** The default status for cases closed by Self-Service users.
SelfServiceSolutionCategoryAvailable	**Type** boolean **Properties** Defaulted on create, Filter, Update **Description** Indicates whether solution categories are available in the Self-Service portal (`true`) or not (`false`).
SelfServiceSolutionCategoryStartNodeId	**Type** reference **Properties** Filter, Nillable, Update **Description** The ID of the top-level category in the Self-Service portal.
SelfServiceSolutionPlural	**Type** string **Properties** Filter, Nillable, Update **Description** The plural version of the term used to represent the Solution object in the Self-Service portal.
SelfServiceSolutionSingle	**Type** string **Properties** Filter, Nillable, Update **Description** The singular version of the term used to represent the Solution object in the Self-Service portal.
SelfServiceStyleSheetUrl	**Type** url **Properties** Filter, Nillable, Update

Field	Details
	Description The public URL of your organization's Self-Service portal stylesheet.
`SelfServiceWelcomePageConfig`	**Type** int **Properties** Filter, Nillable, Update **Description** Integer that represents the welcome page configuration for the Self-Service portal.
`SelfServiceWelcomeText`	**Type** string **Properties** Filter, Nillable, Update **Description** The custom welcome message displayed at the top of the Self-Service home page when Self-Service users log in. Limit: 32,000 characters.
`SignupCountryIsoCode`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ISO country code specified by the user for a sign-up request.
`State`	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** State of the address of the organization. Limit: 80 characters.
`StateCode`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO state code for the organization’s address.

Field	Details
Street	**Type** textarea **Properties** Filter, Group, Nillable, Sort, Update **Description** Street address for the organization. Limit: 255 characters.
TrialExpirationDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date that this organization's trial license expires.
TimeZoneSidKey	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort, Update **Description** Identifies the default time zone of the organization.
UiSkin	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The user interface theme selected for the organization.
UsesStartDateAsFiscalYearName	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the calendar year when the fiscal year begins is referred to as the year of the company's fiscal year (`true`) or not (`false`). For example, if the fiscal year begins in February 2006, a `true` value means the fiscal year is FY2006, and a `false` value means the fiscal year is FY2007.
UsesWebToCase	**Type** boolean

Field	Details
	Properties Filter, Nillable, Update **Description** Indicates whether this organization can use Web-to-Case (`true`) or not (`false`).
`UsesWebToLead`	**Type** boolean **Properties** Filter, Nillable, Update **Description** Indicates whether this organization can use Web-to-Lead (`true`) or not (`false`).
`WebToCaseAssignedEmailTemplateId`	**Type** reference **Properties** Filter, Nillable, Update **Description** The ID of the email template used when a new case is assigned to a user via Web-to-Case.
`WebToCaseCreatedEmailTemplateId`	**Type** reference **Properties** Filter, Nillable, Update **Description** The ID of the email template used when a new case is created via Web-to-Case.
`WebToCaseDefaultCreatorId`	**Type** reference **Properties** Filter, Nillable, Update **Description** The ID of the user specified as the default creator of cases created via Web-to-Case.
`WebToCaseDefaultOrigin`	**Type** string **Properties** Filter, Group, Nillable, Sort, Update

Field	Details
	Description The default value for the **Case Origin** field on cases submitted via Web-to-Case. Limit: 40 characters.

Usage

Query this object to obtain information about an organization's settings. Only one organization object exists per organization.

SEE ALSO:

Object Basics

OrgDeleteRequest

Represents a request to delete a developer edition (DE) org. This object is available in API version 42.0 and later. It is available only in Developer and Database.com editions.

Supported Calls

`create()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The auto-generated ID of this OrgDeleteRequest object.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** The ID of the user who initiated the org delete request.
`RequestType`	**Type** picklist

Field Name	Details
	Properties Create, Filter, Group, Restricted picklist, Sort **Description** Specifies whether you want to deactivate or reactivate the org. When you deactivate an org, you have 30 days to change your mind and reactivate it. After 30 days, the org is locked, and you must contact Salesforce Customer Support to reactivate it. After 60 days, the org is permanently deleted from Salesforce servers. Valid values: • `Deactivate` • `Reactivate`

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

OrgDeleteRequestOwnerSharingRule
Sharing rules are available for the object.

OrgDeleteRequestShare
Sharing is available for the object.

OrgWideEmailAddress

Represents an organization-wide email address for user profiles.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Only authenticated users with the View Setup and Configuration permission can access this object.

Fields

Field	Details
`Address`	**Type** email **Properties** Create, Filter, Sort, Update

Field	Details
	Description The organization-wide email address.
`IsAllowAllProfiles`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** If `true`, any user profile in your organization can use this object. If `false`, only specified user profiles can use this object when sending email. If you do not have the appropriate user profile, you can't use this object.
`DisplayName`	**Type** string **Properties** Create, Filter, Sort, Update **Description** The name that is used to identify the sender of the email.

Usage

This object represents an email alias for user profiles. You can pass in the ID to an OrgWideEmailAddress record when calling `sendEmail()` for a SingleEmailMessage.

OutOfOffice

Represents a user-set value on a profile that shows when the user intends to be out of the office. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `query()`, `undelete()`, `upsert()`, `update()`

Special Access Rules

In Lightning Experience, lets users set a message next to their name in Chatter to show when they plan to be out of the office. The message appears in Lightning Experience, Salesforce Classic, and mobile views. Messages expire automatically after their end date. You can control whether out-of-office functionality is available to your users. Set it up in the Out of Office section in **Setup** > **Chatter Settings**.

Only internal users can set an out-of-office message.

Fields

Field Name	Details
EndDate	**Type** dateTime **Properties** Create, Filter, Sort, Update **Description** The date of the last day a person is out of the office. After the message expires, it goes away automatically.
IsEnabled	**Type** boolean **Properties** Create, Defaulted on create **Description** Indicates whether an out-of-office message can be displayed for a user. The default value is `true`.
Message	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The message portion of the out-of-office message. This text, along with start and end dates, is appended to the user's name in the Salesforce user interface. The maximum length of this string is 40 characters.
StartDate	**Type** dateTime **Properties** Create, Filter, Sort, Update **Description** The date of the first day a person is out of the office.
UserId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the user associated with the out-of-office message.

Usage

- Maximum message length is 40 characters.
- Users can set only their own out-of-office message. An admin can set an out-of-office message for any user.
- The out-of-office message can be set only for internal users.

OutgoingEmail

For internal use only.

OutgoingEmailRelation

For internal use only.

OwnedContentDocument

Represents a file owned by a user. This object is available in version 30.0 and later.

Supported Calls

`describeSObjects()`

Fields

Field Name	Details
`ContentDocumentId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the document.
`ContentSize`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Size of the document in bytes.
`ContentUrl`	**Type** url

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** URL for links and Google Docs. This field is set only for links and Google Docs, and is one of the fields that determine the `FileType`. This field is available in API version 31.0 and later.
`ExternalDataSourceName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of the external data source in which the document is stored. This field is set only for external documents that are connected to Salesforce. This field is available in API version 32.0 and later.
`ExternalDataSourceType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Type of external data source in which the document is stored. This field is set only for external documents that are connected to Salesforce. This field is available in API version 35.0 and later.
`FileExtension`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** File extension of the document. This field is available in API version 31.0 and later.
`FileType`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Type of document, determined by the file extension.

Field Name	Details
OwnerId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the owner of the document.
Title	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** Title of the document.

OwnerChangeOptionInfo

Represents default and optional actions that can be performed when a record's owner is changed. Available in API version 35.0 and later, but to query for change owner metadata, use the OwnerChangeOptionInfo object in Tooling API instead. For more information, see OwnerChangeOptionInfo in the Tooling API.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Use `EntityId` or `DurableId` when querying this object.

PackageLicense

Represents a license for an installed managed package. This object is available in API version 31.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field Name	Details
AllowedLicenses	**Type** int **Properties** Filter, Group, Sort **Description** The number of users allowed to use the package.
ExpirationDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time when the package license expires.
NamespacePrefix	**Type** string **Properties** Filter, Group, Sort **Description** The namespace prefix associated with the package.
Status	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The status of the license. Possible values are: `Active`, `Expired`, `Free`, and `Trial`.
UsedLicenses	**Type** int **Properties** Filter, Group, Sort **Description** The number of users who have a license to the package.

Usage

Use this object to determine the number of licenses allowed and in use for a managed package installed in your organization.

The following example demonstrates the use of the API to manage licenses for a package. The example defines an Apex class that does the following.

- Retrieves the PackageLicense record for the specified package (identified by its namespace prefix).
- Defines a function that returns a list of all users with the specified profile.
- Creates a UserPackageLicense record for each user with that profile, which has the effect of assigning a license for the package to all users with that profile.
- Returns an error message if the number of users exceeds the number of available licenses.

```
public class AssignPackageLicense {

    static String PACKAGE_NAMESPACE_PREFIX = 'acme_101';
    static String PROFILE_ID = '00exx000000jz1SAAQ';
    public static String exceptionText {get; set;}

    public AssignPackageLicense() {
         exceptionText = 'Initialized';
    }

   static List<User> getUsersWithProfile(){
      String userQuery = 'SELECT Id FROM User WHERE ProfileId = :PROFILE_ID';
      List<User> matchingUsers = new List<User>();
      matchingUsers = [SELECT Id FROM User WHERE ProfileId = :PROFILE_ID];
      return matchingUsers;
    }

    public static void assignLicenseByProfile() {
        //find the PackageLicense Id
        PackageLicense pl = [SELECT Id, NamespacePrefix, AllowedLicenses, UsedLicenses,
              ExpirationDate,Status FROM PackageLicense WHERE
              NamespacePrefix = :PACKAGE_NAMESPACE_PREFIX];
        System.assert(pl != null, 'PackageLicense cannot be null.');
        List<User> usersToAssignLicenses = getUsersWithProfile();
        List<UserPackageLicense> firstUPLs = new List<UserPackageLicense>();

        //create a new UserPackageLicense record for each user with the specified profile

        for (Integer i = 0; i< usersToAssignLicenses.size(); i++){
              UserPackageLicense upl = new UserPackageLicense();
              upl.PackageLicenseId = pl.Id;
              upl.UserId = usersToAssignLicenses[i].Id;
              firstUPLs.add(upl);
        }

        try {
          //bulk insert
          insert(firstUPLs);
          } catch(DmlException e) {
             for (Integer i = 0; i < e.getNumDml(); i++) {
             // process exception here
               System.debug(e.getDmlMessage(i));
               String status = e.getDmlStatusCode(i);
               System.debug(status + ' ' + e.getDmlMessage(i));
               if(status.equals('LICENSE_LIMIT_EXCEEDED')){
```

```
                exceptionText = 'You tried to assign more licenses than available. '
                +' You tried to create '+ firstUPLs.size()+' licenses but only have '
                + (pl.AllowedLicenses - pl.UsedLicenses) + ' licenses free.';
                System.debug(exceptionText);
               }
             }
         }
    }
}
```

PackagePushError

Represents an error encountered during a push request. The number of PackagePushError records created depends on the number of push jobs in the request that result in an error.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ErrorDetails`	**Type** string **Properties** Nillable, Sort **Description** Explanation of the error.
`ErrorMessage`	**Type** string **Properties** Nillable, Sort **Description** The error code that appears in the API.
`ErrorSeverity`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Valid values are: • Error

Field Name	Details
	• Warning
ErrorTitle	**Type** string **Properties** Nillable, Sort **Description** The error message title that appears in the API.
ErrorType	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Valid values are: • ApexTestFailure • DeployError • FeatureMissing • IneligibleUpgrade • LimitExceeded • LockingFailure • PACError • UnclassifiedError
PackagePushJobId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Required. The parent push job record ID.

Usage

Suppose that your push upgrade request wasn't successful due to some of its jobs failing. Let's write some code to find out what those errors were.

This code sample uses the Web Services Connector (WSC).

```
// Retrieves all PackagePushError objects associated with the PackagePushJob with the given
// ID
final String PACKAGE_PUSH_ERROR_QUERY = "Select ErrorMessage, ErrorDetails, ErrorTitle,"

+ " ErrorSeverity, ErrorType from PackagePushError where PackagePushJobId = '%s'";
```

```
// job is a PackagePushJob instance
QueryResult queryResult = conn.query(String.format(PACKAGE_PUSH_ERROR_QUERY, job.getId()));

StringBuilder errorMessages = new StringBuilder();
errorMessages.append("Errors for PackagePushJob [").append(job.getId()).append("]:")
 .append("\n");

// There can be multiple PackagePushErrors for a given PackagePushJob
for(SObject r : queryResult.getRecords()) {
 PackagePushError e = (PackagePushError) r;
 errorMessages.append("Title: ").append(e.getErrorTitle()).append("\n");
 errorMessages.append("Severity: ").append(e.getErrorSeverity()).append("\n");
 errorMessages.append("Type: ").append(e.getErrorType()).append("\n");
 errorMessages.append("Message: ").append(e.getErrorMessage()).append("\n");
 errorMessages.append("Details: ").append(e.getErrorDetails()).append("\n");
 errorMessages.append("\n");
}

String errors errorMessages.toString();
```

PackagePushJob

Represents an individual push job for upgrading a package in an org from one version to another version. There can be multiple push jobs created for one push request. For example, if you want to upgrade five orgs as part of one push, you have one PackagePushRequest record and five PackagePushJob records.

Supported Calls

`create()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`DurationSeconds`	**Type** int **Properties** Group, Nillable **Description** The length of time in seconds, that the push upgrade took to complete. This field is new in API version 51.0.
`EndTime`	**Type** dateTime **Properties** Create, Nillable, Update

Field Name	Details
	Description The date and time (UTC) at which the push upgrade ended, in ISO 8601 format. This field is new in API version 51.0.
`PackagePushRequestId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Required. The ID of the parent push request record which must have been created.
`StartTime`	**Type** dateTime **Properties** Create, Nillable, Update **Description** The date and time (UTC) at which the push upgrade actually started, in ISO 8601 format. This field is new in API version 51.0.
`Status`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The status of the job. Valid values are: • Canceled • Created (default) • Failed • In Progress • Pending • Succeeded Don’t specify this value when you create the push job. The default value of `Created` is used.
`SubscriberOrganizationKey`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Required. The organization key of the org where the package is upgraded. This references `orgKey` in PackageSubscriber.

Usage

Suppose that you want to push version 3.4.6 of your package to all orgs. You've already identified the orgs eligible for the upgrade by using MetadataPackageVersion and created the push request using PackagePushRequest. Now let's write some code to create a push job for each eligible org.

This code sample uses the Web Services Connector (WSC).

```
PackageSubscriber[] subscribers = new PackageSubscriber[];

// ... populate eligible and desired subscribers

// Create the PackagePushJob array
PackagePushJob[] jobs = new PackagePushJob[subscribers.length];

for (int i = 0; i < subscribers.length; i++) {
 // create a job for each subscriber...
 PackagePushJob job = new PackagePushJob();
 // ... associate it to the PackagePushRequest ppr...
 job.setPackagePushRequestId(ppr.getId());
 // ... and add the orgKey
 job.setSubscriberOrganizationKey(subscribers[i].getOrgKey());
 jobs[i] = job;
}

// Save the jobs
SaveResult[] saveResults = conn.create(jobs);

// Add the newly generated id's to the PackagePushJob objects
for (int i = 0; i < saveResults.length; i++) {
 if (saveResults[i].isSuccess()) {
  jobs[i].setId(saveResults[i].getId());
 }
}
```

Or, if you're using REST API, submit a POST request to the PackagePushJob sObject endpoint, as in the following example. SOAP API is also supported. This example returns the push job ID (starting with 0DX) that is required to query the status of the job.

```
POST
/services/data/v38.0/sobjects/packagepushjob/
{
   "PackagePushRequestId" : "0DV...",
   "SubscriberOrganizationKey" : "00DR00..."
}
```

Checking the Status of a Push Job

To check the job status, simply query the `Status` field. For example:

```
SELECT Id, Status FROM PackagePushJob WHERE PackagePushRequestId ='0DV...'
```

Here's an example in Java.

```
// Finds the status of the PackagePushJob with the given id
String PACKAGE_PUSH_JOB_STATUS_QUERY = "Select status from PackagePushJob where Id = '%s'";

// job is a PackagePushJob instance
```

```
QueryResult queryResult = conn.query(String.format(PACKAGE_PUSH_JOB_STATUS_QUERY,
job.getId()));

// extract the status from the QueryResult
String status = ((PackagePushJob) queryResult.getRecords()[0]).getStatus();

// optionally, update the PackagePushJob instance with the latest status
job.setStatus(status);
```

You can also continuously poll the job status until the job is done. The following Java example polls the status every 10 seconds.

```
// The set of states that indicate a PackagePushJob has completed
final Set<String> TERMINAL_STATES = new HashSet<>();
TERMINAL_STATES.add("Succeeded");
TERMINAL_STATES.add("Failed");
TERMINAL_STATES.add("Canceled");

String status = queryJobStatus(job); // this method returns the status as retrieved in the
 previous code sample

// If the status is not one of the completed statuses...
while(!TERMINAL_STATES.contains(status)) {
 Thread.sleep(10 * 1000); // ... wait 10 seconds and try again
 status = queryJobStatus(job);
}
```

PackagePushRequest

Represents the push request for upgrading a package in one or many orgs from one version to another version.

Supported Calls

`create()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`DurationSeconds`	**Type** int **Properties** Group, Nillable **Description** The length of time in seconds, that the push upgrade took to complete. This field is new in API version 51.0.
`EndTime`	**Type** dateTime

Field Name	Details
	Properties Create, Nillable, Update **Description** The date and time (UTC) at which the push upgrade ended, in ISO 8601 format. This field is new in API version 51.0.
`PackageVersionId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Required. The non-beta, non-deprecated package version that the package is being upgraded to.
`ScheduledStartTime`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date and time (UTC) at which the push request is processed, in ISO 8601 format. Set this value to the earliest time that you want Salesforce to attempt to start the push. As a best practice, schedule pushes at off-peak hours like 1:00 AM Saturday. If you don't specify a value, the push starts when the package push request's Status is set to `Pending`.
`StartTime`	**Type** dateTime **Properties** Create, Nillable, Update **Description** The date and time (UTC) at which the push upgrade actually started, in ISO 8601 format. This field is new in API version 51.0.
`Status`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The status of the push. Valid values are: • Canceled • Created (default) • Failed

Field Name	Details
	• In Progress • Pending • Succeeded Don't specify this value when you create the push request. The default value of Created is used. Later, change the status to Pending to schedule the push upgrade.

Usage

Suppose that you want to push version 3.4.6 of your package to all orgs. You've already identified the orgs eligible for the upgrade by using MetadataPackageVersion. Now let's write some code to create a push request, which holds a push job for each eligible org.

This code sample uses the Web Services Connector (WSC).

```
// Create a new PackagePushRequest for the versionId to upgrade to
// (for example, versionId is the "04t..." id of version
// 3.4.6 of the package
PackagePushRequest ppr = new PackagePushRequest();
ppr.setPackageVersionId(versionId);

// Optionally, set the start time of the PackagePushRequest to schedule it to begin
// automatically; scheduledStartTime is a java.util.Calendar instance
ppr.setScheduledStartTime(scheduledStartTime);

// Save the PackagePushRequest
SaveResult[] saveResults = conn.create(new SObject[] { ppr });
if (saveResults[0].isSuccess()) {
 // Add the newly generated Id to the object
 ppr.setId(saveResults[0].getId());
} else {
 for (Error error : saveResults[0].getErrors()) {
  System.out.println(error.getMessage());
 }
}
```

Or, if you're using REST API, submit a POST request to the PackagePushRequest sObject endpoint, as in the following example. SOAP API is also supported.

This example returns the push request ID (starting with 0DV) that's required to create push jobs.

```
POST
/services/data/v38.0/sobjects/packagepushrequest/
{
   "PackageVersionId" : "04t...",
   "ScheduledStartTime" : "2016-08-24T21:00:00"
}
```

As your next step, create a push job for each eligible subscriber you want to upgrade using PackagePushJob.

Scheduling the Push Upgrade

To signal that the push upgrade is ready to be processed, change the status of the push request to Pending. If you didn't set a `ScheduledStartTime`, the push upgrade starts immediately after you change the status.

See the following Java example.

```
// ppr is the PackagePushRequest instance
ppr.setStatus("Pending");
conn.update(new SObject[] { ppr });
```

If you're using REST API, submit a PATCH request to the PackagePushRequest sObject endpoint, as in the following example. SOAP API is also supported.

```
PATCH
/services/data/v38.0/sobjects/packagepushrequest/0DV...
{
   "Status" : "Pending"
}
```

Checking the Status of a Push Request

The PackagePushRequest status is `Succeeded` if all its associated jobs are successful; it's `Failed` if at least one job failed.

```
// Finds the status of the PackagePushRequest for a given Id
final String PACKAGE_PUSH_REQUEST_STATUS_QUERY = "Select status from PackagePushRequest"
+
 " where Id = '%s'";

// ppr is a PackagePushRequest instance
QueryResult queryResult = conn.query(String.format(PACKAGE_PUSH_REQUEST_STATUS_QUERY,
 ppr.getId()));

// extract the status from the QueryResult
String status = ((PackagePushRequest) queryResult.getRecords()[0]).getStatus();

// optionally, update the PackagePushRequest instance with the latest status
ppr.setStatus(status);
```

You can also check the status of a job by querying the PackagePushJob's `Status` field.

Aborting a Push Request

You can abort a package push request by changing its status to Canceled.

For example, if you're using the REST API, submit a PATCH request to the PackagePushRequest sObject endpoint.

```
PATCH
/services/data/v38.0/sobjects/packagepushrequest/0DV...
{
   "Status" : "Canceled"
}
```

The following example is for Java.

```
// ppr is the PackagePushRequest instance
ppr.setStatus("Canceled");
```

You can abort a package push request only if its status is Created or Pending. If the abort succeeds, all associated push jobs are also canceled. If you try to abort when the current PackagePushRequest status is Canceled, Succeeded, Failed, or In Progress, the abort doesn't occur, and an error message is returned.

PackageSubscriber

Represents an installation of a package in an org. This object contains installation information for managed or unlocked packages developed in the org you're logged in to.

One record is created per installation. For example, if 5 orgs installed 2 packages, 10 records are created.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`InstalledStatus`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** If the package is installed in the org, the value is `i`.
`InstanceName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The instance that hosts the subscriber org.
`MetadataPackageId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The package ID. Package Ids have a prefix of `033`. This field is available in API version 49.0 and later.
`MetadataPackageVersionId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The 18-character package version ID starting with `04t`.

Field Name	Details
`OrgKey`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The 18-character ID that represents the Salesforce org.
`OrgName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the org where the package is installed.
`OrgStatus`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Valid values are: • `Active` • `Demo` • `Free` • `Inactive` • `Trial` Orgs with an `OrgStatus` of `Inactive` can't receive push upgrades.
`OrgType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Valid values are: • `Production` • `Sandbox`
`ParentOrg`	**Type** string

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The production org from which a sandbox was created.

Usage

Here are examples of the types of API queries you can perform.

Query	String
Get all package subscriber orgs with a specific package ID	`SELECT Id, OrgKey, OrgStatus, OrgName, OrgType FROM PackageSubscriber WHERE MetadataPackageVersionId = '04t...'`
Get all package subscriber orgs that have an installed package created by the org you're logged in to	`SELECT Id, OrgKey, OrgStatus, OrgName, OrgType FROM PackageSubscriber WHERE InstalledStatus = 'i'`

Filter PackageSubscriber Objects by Instance

If you have packages with many subscribers, querying PackageSubscriber objects can take a while. To improve query performance, add filters to your PackageSubscriber queries, such as an `InstanceName` filter. `InstanceName` is a field that represents the instance that the subscriber org is hosted on.

1. Get the org's package and the latest released version of the package.

```
/**
* Get the MetadataPackage object corresponding to this org's managed package
*/
public MetadataPackage getMetadataPackage() throws ConnectionException {
 // retrieve the managed package, which won't have an empty namespace
 QueryResult result = conn.query("select id from  MetadataPackage where namespaceprefix
 <> ''");

 return (MetadataPackage) result.getRecords()[0];
}

/**
* Get the latest MetadataPackageVersion object of the given MetadataPackage
*/
public MetadataPackageVersion getLatestMetadataPackageVersion(MetadataPackage
metadataPackage)
throws ConnectionException {
 // get the latest released version of the given package
 String query = "Select id, ReleaseState, MajorVersion, MinorVersion, PatchVersion,
MetadataPackageId"
   + " From MetadataPackageVersion"
   + " Where MetadataPackageId = '%s' and ReleaseState = 'Released'"
```

```
  + " Order by majorversion desc, minorversion desc, patchversion desc";

 QueryResult result = conn.query(String.format(query, metadataPackage.getId()));

 return (MetadataPackageVersion) result.getRecords()[0];
}
```

2. Get eligible subscribers. The following query strings and methods are modified to allow querying for PackageSubscribers filtered by an instance.

```
static final String PACKAGE_SUBSCRIBER_ORG_KEY_QUERY = "Select OrgKey from
PackageSubscribers where OrgStatus = 'Active'"
 + " and InstalledStatus = 'I'"
 + " and InstanceName = '%s'"; // placeholder for instance values

static final String METADATA_PACKAGE_VERSION_QUERY = "Select Id, Name, ReleaseState,
(%s) from MetadataPackageVersion"
 + " where MetadataPackageId = '%s' AND ReleaseState = 'Released'"
 + " AND (MajorVersion < %s OR (MajorVersion = %s and MinorVersion < %s)"
 + " OR (MajorVersion = %s and MinorVersion = %s and PatchVersion < %s))";

/**
* Get all PackageSubscribers on the given instance that are eligible to upgrade to the
 given
* MetadataPackageVersion
*/
public PackageSubscriber[] getEligibleSubscriberIds(MetadataPackageVersion version,
String instanceName) throws ConnectionException {
 String allPackageId = version.getMetadataPackageId();
 Integer major = version.getMajorVersion();
 Integer minor = version.getMinorVersion();
 Integer patch = version.getPatchVersion();

 return getEligibleSubscriberIds(major, minor, patch, allPackageId, instanceName);
}
```

```
public PackageSubscriber[] getEligibleSubscriberIds(Integer major, Integer minor, Integer
 patch, String packageId, String instanceName) throws ConnectionException {
 String subscriberQuery = String.format(PACKAGE_SUBSCRIBER_ORG_KEY_QUERY, instanceName);
QueryResult results = conn.query(String.format(METADATA_PACKAGE_VERSION_QUERY,
subscriberQuery, packageId, major, major, minor, major, minor, patch));

 return Arrays.stream(results.getRecords()).map(MetadataPackageVersion.class::cast)
  .filter(mpv -> mpv.getPackageSubscribers() != null)
  .flatMap(mpv -> Arrays.stream(mpv.getPackageSubscribers().getRecords()))
  .map(PackageSubscriber.class::cast)
  .toArray(PackageSubscriber[]::new);
}
```

3. Put it all together. The following code sample shows how to use the previous methods to modify the workflow to perform package pushes by instance.

```
String[] instances = { "NA4" }; // Here we list the instances we would like to push to
MetadataPackage metadataPackage = api.getMetadataPackage();
```

```
MetadataPackageVersion version = api.getLatestMetadataPackageVersion(metadataPackage);

// do pushes by instance to avoid API timeouts retrieving PackageSubscribers
for (String instanceName : instances) {
PackageSubscriber[] eligibleSubscribers = api.getEligibleSubscriberIds(version,
instanceName);

// ... proceed with creating PushRequests and PushJobs as before
```

Partner

Represents a partner relationship between two Account records or between an Opportunity record and an Account record.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`AccountFromId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** Required if `OpportunityId` is null. ID of the main account in a partner relationship between two accounts. Specifying this field when creating a Partner record creates two AccountPartner records, one for each direction of the relationship. If you specify the `OpportunityId` field, you can't specify this field as well.
`AccountToId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the Partner Account related to either an opportunity or an account. You must specify this field when creating an Opportunity Partner or an Account Partner record.
`IsPrimary`	**Type** boolean

Field	Details
	Properties Create, Defaulted on create, Filter, Group, Sort **Description** Valid for Opportunity Partners only. Indicates that the account is the primary partner for the opportunity. Only one account can be marked as primary for an opportunity. If you set this field to 1 (`true`) upon insert of a new opportunity partner, this field is automatically set to 0 (`false`) for any other primary partners for that opportunity. Label is **Primary**.
`OpportunityId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** Required if `AccountFromId` is null. ID of the opportunity in a partner relationship between an account and an opportunity. Specifying this field when creating a record creates an OpportunityPartner record. If you specify the `AccountFromId` field, you can't also specify this field.
`ReversePartnerId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the account in a partner relationship.
`Role`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort **Description** UserRole that the account has toward the related opportunity or account, such as consultant or distributor.

Roles

In the Salesforce user interface, system administrators can set up the valid role values and their corresponding reverse role values in the PartnerRole object. Each account in the relationship is assigned a `Role` (such as `Consultant` or `Distributor`) designating that account's role toward the related account or opportunity.

Creating an Account-Opportunity Partner Relationship

When you create a partner relationship between an account and an opportunity (when you create a Partner record and specify the `OpportunityId` field), the API automatically creates an OpportunityPartner record with the corresponding values:

- The value of the Partner field `AccountToId` maps to the value of the OpportunityPartner field `AccountToId`.
- The values of the `OpportunityId`, `Role`, and `IsPrimary` fields in both records are the same.
- If you set the `IsPrimary` value to 1 (`true`) upon insert of a new OpportunityPartner, the `IsPrimary` value is automatically set to 0 (`false`) for any existing primary partners for that opportunity.

This mapping allows the API to manage the records and their relationships efficiently.

Creating an Account-Account Partner Relationship

When you create a partner relationship between two accounts (when you create a Partner record and specify the `AccountFromId`), the API automatically creates two AccountPartner records, one for the forward relationship and one for the reverse. For example, if you create a Partner relationship with "Acme, Inc." as the `AccountFromId` and "Acme Consulting" as the `AccountToId`, the API automatically creates two AccountPartner records:

- The forward relationship AccountPartner with "Acme, Inc." as the `AccountFromId` and "Acme Consulting" as the `AccountToId`.
- The reverse relationship AccountPartner with "Acme Consulting" as the `AccountFromId` and "Acme, Inc." as the `AccountToId`.
- The value of the `Role` field in the reverse relationship AccountPartner is set to the PartnerRole record `ReverseRole` value associated with the value of the `Role` field in the forward relationship AccountPartner.

This mapping allows the API to manage the records and their relationships efficiently.

SEE ALSO:

AccountPartner

OpportunityPartner

UserRole

PartnerRole

PartnerFundAllocation

Represents allocated funds from a partner marketing budget for channel partners. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Fields

Field Name	Details
`Amount`	**Type** currency

Field Name	Details
	Properties Create, Filter, Sort, Update **Description** Total amount of the allocation.
BudgetId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the partner marketing budget.
ChannelPartnerId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the channel partner.
Description	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of the allocation.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (LastReferencedDate) but not viewed it.

Field Name	Details
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner of the allocation.
Title	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The title of the allocation.
TotalApprovedFcs	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of approved fund claims.
TotalApprovedFrs	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of approved fund requests.
TotalReimbursedFcs	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of reimbursed fund claims.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

PartnerFundAllocationFeed

Feed tracking is available for the object.

PartnerFundAllocationHistory
History is available for tracked fields of the object.

PartnerFundAllocationOwnerSharingRule
Sharing rules are available for the object.

PartnerFundAllocationShare
Sharing is available for the object.

PartnerFundClaim

Represents a claim of funds from the partner marketing budget by a channel partner. This object is available in API version 41.0 and later.

Supported Calls

`create()` `delete()` `describeLayout()` `describeSObjects()` `getDeleted()` `getUpdated()` `query()` `retrieve()` `search()` `update()`, `upsert()`

Fields

Field Name	Details
`AllocationId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the partner fund allocation.
`Amount`	**Type** currency **Properties** Create, Filter, Sort, Update **Description** Amount of the claim.
`BudgetId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the partner marketing budget.
`ChannelPartnerId`	**Type** reference

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** ID of the channel partner.
Description	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of the fund claim.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (LastReferencedDate) but not viewed it.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner of the fund claim.
RequestId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the partner fund request.

Field Name	Details
`Status`	**Type** picklist **Properties** Create, Filter, Group, Nillable Restricted picklist, Sort, Update **Description** Status of the fund claim. Values are: • `Draft` • `Approved` • `Rejected` • `Paid`
`Title`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Title of the fund claim.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

PartnerFundClaimFeed
Feed tracking is available for the object.

PartnerFundClaimHistory
History is available for tracked fields of the object.

PartnerFundClaimOwnerSharingRule
Sharing rules are available for the object.

PartnerFundClaimShare
Sharing is available for the object.

PartnerFundRequest

Represents a request for funds from the partner marketing budget by a channel partner. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()` `describeLayout()` `describeSObjects()` `getDeleted()` `getUpdated()` `query()` `retrieve()` `search()` `update()`, `upsert()`

Fields

Field Name	Details
Activity	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Activity that is covered by the funds, for example, a trade show or seminar.
AllocationId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the partner fund allocation.
Amount	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** Approved amount of request.
BudgetId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the partner marketing budget.
ChannelPartnerId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the channel partner.
Description	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description Description of the fund request.
`DesiredOutcome`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Desired outcome if requested funds are used.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (`LastReferencedDate`) but not viewed it.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner of the fund request.
`RequestedAmount`	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** Amount of the fund request.

Field Name	Details
Status	**Type** picklist **Properties** Create, Filter, Nillable, Group, Restricted picklist, Sort, Update **Description** Status of the fund request. Values are: • Draft • Approved • Rejected
Title	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Title of the fund request.
TotalApprovedFcs	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of approved fund claims.
TotalReimbursedFcs	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of reimbursed fund claims.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

PartnerFundRequestFeed
Feed tracking is available for the object.

PartnerFundRequestHistory
History is available for tracked fields of the object.

PartnerFundRequestOwnerSharingRule
Sharing rules are available for the object.

PartnerFundRequestShare
Sharing is available for the object.

PartnerMarketingBudget

Represents a budget that provides funds to channel partners for selling and marketing products and services. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Fields

Field Name	Details
`Amount`	**Type** currency **Properties** Create, Filter, Sort, Update **Description** Total amount of the budget.
`ChannelPartnerId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the channel partner. This field is available in API version 45.0 and later.
`Description`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of the budget.
`EndDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description Date when the budget is no longer available.
IsIgnoreValidation	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** When enabled, ignores restrictions related to the child objects connected to the budget. Note that individual totals for allocation amounts, request amounts, and claims amounts cannot exceed the total of their parent budget. Field is default off (false) on create. Once enabled (true), this field cannot be disabled. This field is available in API version 44.0 and later.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (`LastReferencedDate`) but not viewed it.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner of the budget.
StartDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description Date when the budget becomes available.
Title	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Title of the budget.
TotalAllocatedAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total funds allocated to channel partners or as a fund pool.
TotalApprovedFcs	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of approved fund claims.
TotalApprovedFrs	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of approved fund requests.
TotalReimbursedFcs	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of reimbursed fund claims.
Type	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update

Field Name	Details
	Description Type of budget. Values are: • `Co-Operated Budget`—Funds accrue based on a percentage of partner sales. The funds are available based on previous activity. • `Marketing Funds`—Funds are issued to partners in advance of sales. The funds are awarded based on predicted or expected behavior.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

PartnerMarketingBudgetFeed
Feed tracking is available for the object.

PartnerMarketingBudgetHistory
History is available for tracked fields of the object.

PartnerMarketingBudgetOwnerSharingRule
Sharing rules are available for the object.

PartnerMarketingBudgetShare
Sharing is available for the object.

PartnerNetworkConnection

Represents a Salesforce to Salesforce connection between Salesforce organizations.

Supported Calls

`create()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

As of Winter '21 and later, only authenticated internal and external users can access this object.

Fields

Field	Details
`AccountId`	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description ID of the Account associated with this connection.
`ConnectionName`	**Type** string **Properties** Filter, idLookup, Sort **Description** A descriptive name for the connection. Limit: 295 characters.
`ConnectionStatus`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The status of the Salesforce to Salesforce connection. The picklist includes the following values: • `Sent` • `Received` • `Pending` • `Accepted` • `Rejected` • `Inactive` • `Disconnecting` • `ConnectionSuspended` • `SubscribeInProgress` • `UsersInitialSync` • `BulkSyncMetadata`
`ConnectionType`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The type of Salesforce to Salesforce connection. The picklist includes the following values: • `Standard` • `Replication` This field is available in API version 30.0 and later.

Field	Details
ContactId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the Contact associated with this connection.
IsSyncAuditFields	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Specifies whether audit fields are synced between the primary and secondary organization in a replication connection. This field is available in API version 32.0 and later, and is only accessible in Salesforce organizations where Organization Sync is enabled.
IsSyncMetadata	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Specifies whether supported types of metadata are synced from the primary to the secondary organization in a replication connection. This field is available in API version 33.0 and later, and is only accessible in Salesforce organizations where Organization Sync is enabled.
IsSyncUsers	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Specifies whether users with standard Salesforce user licenses are synced between the primary and secondary organization in a replication connection. This field is available in API version 35.0 and later, and is only accessible in Salesforce organizations where Organization Sync is enabled.
PrimaryContactId	**Type** reference **Properties** Filter, Group, Sort

Field	Details
	Description ID of the User associated with this connection.
ReplicationRole	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The role of this Salesforce organization in the replication connection. The picklist includes the following values: • Primary • Secondary This field is available in API version 30.0 and later, and is only accessible in Salesforce organizations where Organization Sync is enabled.
ResponseDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the connection was accepted or rejected.

Usage

Represents Salesforce to Salesforce standard and replication connections. This object is referenced by all objects that have been shared with other organizations, enabling you to determine which connections shared a record with you. If the organization does not have Salesforce to Salesforce enabled, the PartnerNetworkConnection object is not available, and you can't access it via the API.

SEE ALSO:

PartnerNetworkRecordConnection

PartnerNetworkRecordConnection

Represents a record shared between Salesforce organizations using Salesforce to Salesforce.

Supported Calls

`create()`, `query()`

Special Access Rules

As of Winter ’21 and later, only authenticated internal and external users can access this object.

Fields

Field	Details
ConnectionId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** Required. ID of the connection a record is shared with.
EndDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date that sharing of the record was stopped.
LocalRecordId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the shared record.
ParentRecordId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the parent record of the shared record.
PartnerRecordId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the shared record in the connection's organization.

Field	Details
RelatedRecords	**Type** string **Properties** Create, Filter, Nillable, Sort **Description** A comma-separated list of API names for child records to be shared with a parent record.
SendClosedTasks	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Forwards closed tasks related to the shared record.
SendEmails	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Sends an email notifying the connection's representative that you have forwarded the record to them. Only new recipients of a record will receive a notification email.
SendOpenTasks	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Forwards open tasks related to the shared record.
StartDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date that the shared record was accepted.
Status	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort

Field	Details
	Description The status of the shared record. One of the following values: • `Active (received)` • `Active (sent)` • `Connected` • `Inactive` • `Inactive (converted)` • `Inactive (deleted)` • `Pending (sent)`

Usage

When you create a PartnerNetworkRecordConnection, you forward a record to a connection.

Note: Attempting to forward a record from an object to which the connection is not subscribed results in an `Invalid Partner Network Status` error.

When you delete a PartnerNetworkRecordConnection, you stop sharing a record with a connection.

- To share a record, use the following fields: `LocalRecordID` and `ConnectionId`
- To share a child of a parent record, use the following fields: `LocalRecordID`, `ConnectionId`, and `ParentRecordID`
- To share a child of a parent record and its child records, use the following fields: `LocalRecordID`, `ConnectionId`, `ParentRecordID`, and `RelatedRecords`

If the organization does not have Salesforce to Salesforce enabled, the PartnerNetworkRecordConnection object is not available, and you can't access it using the API.

Sample Code—Apex

The following example shows how to forward a record.

```
List<PartnerNetworkConnection)> connMap = new List<PartnerNetworkConnection>(
    [select Id, ConnectionStatus, ConnectionName from PartnerNetworkConnection
        where ConnectionStatus = 'Accepted']
);
List<PartnerNetworkRecordConnection> PNRecordList = new
List<PartnerNetworkRecordConnection>();
for(PartnerNetworkConnection network : connMap) {
     PartnerNetworkRecordConnection newrecord = new PartnerNetworkRecordConnection();

    newrecord.ConnectionId = network.Id;
    newrecord.LocalRecordId = accountId;
    newrecord.RelatedRecords = 'Contact,Opportunity,Orders__c';
    newrecord.SendClosedTasks = true;
    newrecord.SendOpenTasks = true;
    newrecord.SendEmails = true;
    PNRecordList.add(newrecord);
```

```
}
//One DML call for the entire list of new records
insert PNRecordList;
}
```

The following example shows how to stop sharing a record.

```
List<PartnerNetworkRecordConnection> recordConns = new List<PartnerNetworkRecordConnection>(

    [select Id, Status, ConnectionId, LocalRecordId from PartnerNetworkRecordConnection
        where LocalRecordId in :accounts]
);

List<PartnerNetworkRecordConnection> DeleteRecordList = new
List<PartnerNetworkRecordConnection>();
for(PartnerNetworkRecordConnection recordConn : recordConns) {
        if(recordConn.Status.equalsignorecase('Sent')){ //account is connected - outbound

           DeleteRecordList.add(recordConn);
}
delete DeleteRecordList;
```

SEE ALSO:

PartnerNetworkConnection

PartnerNetworkSyncLog

Represents the Org Sync Log tab in Salesforce, where Salesforce administrators can track the replication of record inserts and updates being performed in Organization Sync. The Connection Detail page for the replication connection also displays the Org Sync Log's twenty most recent entries, and provides a link to the log.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`

Special Access Rules

The Org Sync Log tab can only be added in organizations where Organization Sync has been enabled. To add the tab to the Salesforce user interface, users must also have the "Manage Connections" user permission.

Fields

Field Name	Details
`ConnectionEvent`	**Type** picklist

Field Name	Details
	Properties Filter, Group, Nillable, Restricted picklist, Sort **Description** The action being replicated to the partner organization, such as a record insertion.
ConnectionId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the Salesforce to Salesforce replication connection in which the replication event succeeded or failed.
Description	**Type** textarea **Properties** Nillable **Description** A description of the replication event.
EntityType	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The type of record being inserted or updated.
Error	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The code used to describe the replication failure or success.
LocalRecord	**Type** string **Properties** Filter, Group, Sort **Description** The record being inserted or updated.

Field Name	Details
Status	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** An item is added to the Organization Sync Log if it failed to be replicated to the linked organization. This picklist includes the following values: • `Failed`: The replication continued to fail after multiple retries, and won't be retried further. • `Resolved`: The replication succeeded after retrying. • `Retrying`: Salesforce is retrying the replication. This field is available in API version 35.0 and later.

PartnerRole

Represents a role for an account Partner, such as consultant, supplier, and so on.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
ApiName	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** Uniquely identifies a picklist value so it can be retrieved without using an id or master label.
MasterLabel	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description Master label for this partner role value. This display value is the internal label that does not get translated. Limit: 255 characters.
`ReverseRole`	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** Name of the reverse role that corresponds to this partner role. For example, if the role is “subcontractor,” then the reverse role might be “general contractor.” In the user interface, assigning a partner role to an account creates a reverse partner relationship so that both accounts list the other as a partner.
`SortOrder`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Number used to sort this value in the partner role picklist. These numbers are not guaranteed to be sequential, as some previous partner role values might have been deleted.

Usage

This object represents a value in the partner role picklist. In the user interface, the partner role picklist provides additional information about the role of a Partner, such as their corresponding reverse role. Query this object to retrieve the set of values in the partner role picklist, and then use that information while processing PartnerRole records to determine more information about a given partner role. For example, the application could determine the reverse role of a given Partner `Role` value and the value of the `ReverseRole` property in the associated PartnerRole object.

SEE ALSO:

Object Basics

PartyConsent

Represents consent preferences for an individual. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
Action	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** The action that the Individual is consenting to. Possible values are: • CrossDevice • DataCollection • Reidentification • Segment • ShareData • Target
CaptureContactPointType	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Required. Indicates how you captured consent. Possible values are: • Email • MailingAddress • Phone • Social • Web
CaptureDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Required. Date when consent was captured.
CaptureSource	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description Required. Indicates how you captured consent. For example, a website or online form.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, it's possible that this record was referenced (`LastReferencedDate`) and not viewed.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Name of the party consent record.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the account owner associated with this customer.
`PartyId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Required. Represents the record based on the Individual object you want to associate consent with.
`PrivacyConsentStatus`	**Type** picklist

Field	Details
	Properties Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. Identifies whether the individual associated with this record agrees to this form of contact. Possible values are: • `NotSeen` • `OptIn` • `OptOut` • `Seen`

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

PartyConsentFeed
Feed tracking is available for the object.

PartyConsentHistory
History is available for tracked fields of the object.

PartyConsentOwnerSharingRule
Sharing rules are available for the object.

PartyConsentShare
Sharing is available for the object.

Payment

Represents a single event where the customer creates a payment. For credit cards, this is a payment capture or payment sale, which won't show up in the end user's credit card statement. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

To access Commerce Payments entities, your org must have a Salesforce Order Management license with the Payment Platform org permission activated. Commerce Payments entities are available only in Lightning Experience.

Fields

Field	Details
AccountId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The account of the customer who made the payment.
Amount	**Type** currency **Properties** Create, Filter, Sort, Update **Description** The amount to be debited or captured.
Balance	**Type** currency **Properties** Filter, Nillable, Sort **Description** The total amount – the net applied amount.
CancellationDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date that the payment was voided.
CancellationEffectiveDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date when the cancellation of this payment takes effect.
CancellationGatewayDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update

Field	Details
	Description The gateway provides this date following a successful cancellation request.
CancellationGatewayRefNumber	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** System-provided unique transaction ID from the payment gateway.
CancellationGatewayResultCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Gateway-specific result code. Must be mapped to a Salesforce-specific result code.
CancellationSfResultCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A Salesforce result code that can be mapped to one or more gateway result codes. We recommend that the payment gateway adapter layer maps gateway-specific codes to the Salesforce result code.
ClientContext	**Type** textarea **Properties** Nillable **Description** Contains caller context for payment APIs. Useful for re-establishing context during an asynchronous payment transaction.
Comments	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Users can provide additional details about the payment record. Supports a maximum of 1000 characters.

Field	Details
CurrencyIsoCode	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Three-letter ISO 4217 currency code associated with the payment group record.
Date	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date when this payment record was created.
EffectiveDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date that this payment takes effect.
Email	**Type** email **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Email address of the user who initiated the payment.
GatewayDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The gateway provides this date for reference following a successful gateway communication.
GatewayRefDetails	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update

Field	Details
	Description Additional data that can't be stored in other fields on the payment record. You can use this field for transactions following the initial transaction that creates the payment record. You can use any data that isn't normalized in financial entities. This field has a maximum length of 1000 characters and can store data as JSON or XML.
`GatewayRefNumber`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Unique transaction ID created by the payment gateway.
`GatewayResultCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Gateway-specific result code that must map to a Salesforce-specific result code. One Salesforce result code can map to multiple gateway result codes.
`GatewayResultCodeDescription`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of the gateway's result code.
`ImpactAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Shows the payment's financial impact against the customer's accounts receivable. If the payment is valid, this value is the negative of the payment amount. If the payment is voided, this value is 0.
`IpAddress`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description The IP address of the user who initiated the payment.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
MacAddress	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The MAC address of the user who initiated the payment.
NetApplied	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total payment amount of that has been applied, including adjustments.
NetRefundApplied	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total refund amount that has been applied to the payment, including adjustments.
OrderPaymentSummaryId	**Type** reference

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** Order payment summaries show the balances of each authorization, capture, and refund made against an order.
PaymentAuthorizationId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The authorization record for this payment. If there is a delayed capture (when the capture occurs after the authorization), all captures must be made against a previously successful authorization transaction.
PaymentGatewayId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the payment gateway that processed the payment. Populated from the authorization record if there is delayed payment.
PaymentGroupId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Payment groups organize all the payment transactions that have been made against a record such as an account or contract. Populated from the authorization record if there is delayed payment.
PaymentMethodId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The payment method that the customer used to provide this payment information.
PaymentNumber	**Type** string

Field	Details
	Properties Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** System-created unique ID for this payment record.
`Phone`	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Phone number of the customer who initiated the payment.
`ProcessingMode`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** Defines whether the payment has been made outside of the payment platform. Possible values are: • `External`: Transactions happened outside of the Salesforce payments platform. • `Salesforce`: Salesforce made and recorded an external call to the payment gateway.

`SfResultCode`	**Type**
	picklist
	Properties
	Create, Filter, Group, Nillable, Restricted picklist, Sort, Update
	Description
	Salesforce-specific result code that can map to one or more gateway result codes. We recommend configuring the payment gateway adapter layer to map gateway result codes to the appropriate Salesforce result code.
	Possible values are:
	• `Decline`: The gateway call failed, but it may still work if the transaction is attempted again. For example, the customer had insufficient funds or briefly lost their connection.
	• `Indeterminate`: The gateway didn't respond to the call. This response usually happens when Salesforce times out while waiting for a response from the gateway.
	• `PermanentFail`: The gateway call failed and won't work even if tried again. Gateway calls fail permanently for one of two reasons:
	  – Hard Decline: The customer's payment account has been closed or terminated.
	  – Fraud: The gateway recognized the payment or payment method as known fraud.

Field	Details
	• `RequiresReview`: The customer bank requires more information before completing the payment. • `Success`: The gateway call succeeded. • `SystemError`: Salesforce ended the payment request before receiving a response. For example, Salesforce lost credentials or access to its server. Salesforce ends payment calls if it doesn't receive a response from the gateway within two minutes. • `ValidationError`: Customer payment data was incorrect, such as a misspelling in the credit card address or an incorrect CVV.
`Status`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Defines the state of this payment. Possible values are: • `Canceled`: This payment has been unapplied from its target and can to longer be allocated. • `Draft`: The payment can be edited before posting it and allocating it to a target. • `Processed`: This payment has been finalized and can be allocated against a target. Users can manually change the Status field's values as follows: • Draft to Processed • Processed to Canceled • Draft to Canceled
`TotalApplied`	**Type** currency **Properties** Filter, Nillable, Sort **Description** The total amount of this payment's balance that has been applied against an invoice.
`TotalRefundApplied`	**Type** currency **Properties** Filter, Nillable, Sort **Description** The total amount of a refund that has been applied against this payment.
`TotalRefundUnapplied`	**Type** currency

Field	Details
	Properties Filter, Nillable, Sort **Description** The total amount of a previously applied refund that has since been unapplied from this payment.
`TotalUnapplied`	**Type** currency **Properties** Filter, Nillable, Sort **Description** The total amount of this payment that was previously applied and then unapplied.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Defines how the customer used this payment. Possible values are: • `Capture` • `Sale`

SEE ALSO:

OrderPaymentSummary

PaymentAuthAdjustment

Shows information about an adjustment made to an authorized transaction. This object is available in API version 51.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

To access Commerce Payments entities, your org must have a Salesforce Order Management license. Commerce Payments entities are available only in Lightning Experience.

Fields

Field	Details
AccountId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The account for the payment authorization adjustment. Inherited from the payment authorization.
Amount	**Type** currency **Properties** Create, Filter, Sort, Update **Description** Amount of adjustment applied to the parent payment authorization.
Comments	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Users can add comments to provide additional details about a record. Maximum of 1000 characters.
CurrencyIsoCode	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Three-letter ISO 4217 currency code associated with the payment authorization adjustment record.
Date	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date that the adjustment occurred.
EffectiveDate	**Type** dateTime

Field	Details
	Properties Create, Filter, Nillable, Sort, Update **Description** The date that the adjustment takes effect on the authorization.
`Email`	**Type** email **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Email address of the parent payment authorization owner.
`GatewayDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date and time that the reversal transaction occurred in the payment gateway.
`GatewayRefDetails`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description**
`GatewayRefNumber`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Additional data that can't be stored in other fields on the payment record. You can use this field for transactions following the initial transaction that creates the payment record. You can use any data that isn't normalized in financial entities. This field has a maximum length of 1000 characters and can store data as JSON or XML.
`GatewayResultCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Gateway-specific result code. Must be mapped to a Salesforce-specific result code

Field	Details
GatewayResultCodeDescription	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of the gateway’s result code. This field is useful for providing more information around why the gateway returned a certain result code.
IpAddress	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Fraud parameter.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
MacAddress	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Fraud parameter.
PaymentAuthAdjustmentNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort

Field	Details
	Description
`PaymentAuthorizationId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the payment authorization on which the adjustment occurred.
`Phone`	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Fraud parameter.
`ProcessingMode`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Defines whether the payment has been made outside of the payment platform. Possible values are: • `External`—Transactions happened outside of the Salesforce payments platform. • `Salesforce`—Salesforce made and recorded an external call to the payment gateway.
`SfResultCode`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Salesforce-specific result code that can map to one or more gateway result codes. We recommend configuring the payment gateway adapter layer to map gateway result codes to the appropriate Salesforce result code. Possible values are: • `Decline`—The gateway call failed, but it may still work if the transaction is attempted again. For example, the customer had insufficient funds or briefly lost their connection. • `Indeterminate`—The gateway didn't respond to the call. This response usually happens when Salesforce times out while waiting for a response from the gateway. • `PermanentFail`—The gateway call failed and won't work even if tried again. Gateway calls fail permanently for one of two reasons:

Field	Details
	– Hard Decline: The customer's payment account has been closed or terminated. – Fraud: The gateway recognized the payment or payment method as known fraud. • `RequiresReview`—The customer bank requires more information before completing the payment. • `Success`—The gateway call succeeded. • `SystemError`—Salesforce ended the payment request before receiving a response. For example, Salesforce lost credentials or access to its server. Salesforce ends payment calls if it doesn't receive a response from the gateway within two minutes. • `ValidationError`—Customer payment data was incorrect, such as a misspelling in the credit card address or an incorrect CVV.
`Status`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Defines the state of the payment authorization reversal. Possible values are: • `Canceled`—The payment authorization reversal has been canceled. The parent authorization has returned to its pre-reversal balance. • `Draft`: The payment authorization reversal can be edited before applying it against the parent authorization. • `Processed`—The payment authorization reversal has been finalized. Users can manually change the Status field's values as follows: • Draft to Processed • Processed to Canceled • Draft to Canceled
`Type`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Defines how the customer used the reversal. Possible values are: • `Capture` • `Reversal` • `Sale`

PaymentAuthorization

Represents a single payment authorization event where users can capture or reverse a payment against a reserve of funds. This object is available in API version 48.0 and later.

A common type of payment authorization occurs when a user sees a pending transaction against their credit card account.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

To access Commerce Payments entities, your org must have a Salesforce Order Management license with the Payment Platform org permission activated. Commerce Payments entities are available only in Lightning Experience.

Fields

Field	Details
`AccountId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Customer account.
`Amount`	**Type** currency **Properties** Create, Filter, Sort, Update **Description** The amount authorized for the payment event.
`Balance`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Authorized amount – total processed captured amount – total processed authorization reversal amount. Balance can be positive or negative.
`Comments`	**Type** textarea

Field	Details
	Properties Create, Filter, Nillable, Sort, Update **Description** Users can enter comments to provide additional details about the authorization.
CurrencyIsoCode	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Three-letter ISO 4217 currency code associated with the payment authorization record.
Date	**Type** dateTime **Properties** Create, Defaulted on create, Filter, Nillable, Sort, Update **Description** By default, the day the authorization record was created. Users can also enter a different date. Editable only when the payment authorization's status is Draft.
EffectiveDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date on which the authorization takes effect. Editable only when the payment authorization's status is Draft.
Email	**Type** email **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Fraud parameter.
ExpirationDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Authorizations can't be captured after their expiration dates.

Field	Details
GatewayAuthCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Authorization approval code from the payment gateway.
GatewayDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Payment authorization approvement code from the payment gateway.
GatewayRefDetails	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Additional data that can't be stored in other fields on the payment record. You can use this field for transactions following the initial transaction that creates the payment record. You can use any data that isn't normalized in financial entities. This field has a maximum length of 1000 characters and can store data as JSON or XML.
GatewayRefNumber	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Unique transaction ID from the payment gateway.
GatewayResultCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Gateway-specific result code. Must be mapped to a Salesforce-specific result code.
GatewayResultCodeDescription	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description Description of the gateway's result code. This field is useful for providing more information around why the gateway returned a certain result code.
IpAddress	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Fraud parameter.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
MacAddress	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Fraud parameter.
OrderPaymentSummaryId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Order payment summaries show the balances of each authorization, capture, and refund made against an order.

Field	Details
PaymentAuthorizationNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** System-provided unique ID for a payment authorization record.
PaymentGatewayId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The Salesforce payment gateway record that created this authorization. This gateway will be used for subsequent captures.
PaymentGroupId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Payment groups organize all the payment transactions that have been made against a record such as an account or contract. Populated from the authorization record if there is delayed payment.
PaymentMethodId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The customer payment method provided during this authorization.
Phone	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Fraud parameter.
ProcessingMode	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort

Field	Details
	Description Defines whether the payment has been made outside of the payment platform. Possible values are: • `External`—Transactions happened outside of the Salesforce payments platform. • `Salesforce`—Salesforce made and recorded an external call to the payment gateway.

`SfResultCode`	**Type**
	picklist
	Properties
	Create, Filter, Group, Nillable, Restricted picklist, Sort, Update
	Description
	Salesforce-specific result code that can map to one or more gateway result codes. We recommend configuring the payment gateway adapter layer to map gateway result codes to the appropriate Salesforce result code.
	Possible values are:
	• `Decline`—The gateway call failed, but it may still work if the transaction is attempted again. For example, the customer had insufficient funds or briefly lost their connection.
	• `Indeterminate`—The gateway didn't respond to the call. This response usually happens when Salesforce times out while waiting for a response from the gateway.
	• `PermanentFail`—The gateway call failed and won't work even if tried again. Gateway calls fail permanently for one of two reasons:
	  – Hard Decline: The customer's payment account has been closed or terminated.
	  – Fraud: The gateway recognized the payment or payment method as known fraud.
	• `RequiresReview`—The customer bank requires more information before completing the payment.
	• `Success`—The gateway call succeeded.
	• `SystemError`—Salesforce ended the payment request before receiving a response. For example, Salesforce lost credentials or access to its server. Salesforce ends payment calls if it doesn't receive a response from the gateway within two minutes.
	• `ValidationError`—Customer payment data was incorrect, such as a misspelling in the credit card address or an incorrect CVV.

`Status`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Defines the state of this payment. Possible values are:

Field	Details
	• `Canceled`—This payment has been unapplied from its target and can to longer be allocated. • `Draft`—The payment can be edited before posting it and allocating it to a target. • `Failed`—Authorization for the payment failed. • `Pending`— • `Processed`—This payment has been finalized and can be allocated against a target. Users can manually change the Status field's values as follows: • Draft to Processed • Processed to Canceled • Draft to Canceled
`TotalAuthReversalAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** The sum of all processed authorization reversals against the payment authorization. This is a calculated field.
`TotalPaymentCaptureAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** The sum of all authorization captures related to this payment authorization.

SEE ALSO:
OrderPaymentSummary

PaymentGateway

Platform entity that represents the connection to the external payment gateway. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

To access Commerce Payments entities, your org must have a Salesforce Order Management license with the Payment Platform org permission activated. Commerce Payments entities are available only in Lightning Experience.

Fields

Field	Details
`Comments`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Users can add comments to provide additional details about a record. Maximum of 1000 characters.
`ExternalReference`	**Type** string **Properties** Create, Filter, Group, idLookup, Nillable, Sort, Update **Description** Allows Order Management Services to map an Order Management gateway to a Payments Platform gateway. This field is unique within your organization.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
`MerchantCredentialId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update

Field	Details
	Description Looks up to the merchant credential setup entity to reference merchant information.
`PaymentGatewayName`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** User-defined name for the payment gateway.
`PaymentGatewayProviderId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Looks up to the payment gateway provider, which captures common details and configurations for payment gateways.
`Status`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Defines whether the Payments Platform can use this payment gateway for calls to the external payment gateway. Inactive payment gateways can't be used. Possible values are: • `Active` • `Inactive`

PaymentGatewayLog

Stores information exchanged between the Salesforce payments platform and external payment gateways. Gateway logs can also record payloads from external payment entities. This object is available in API version 48.0 and later.

Deleting or archiving a payment gateway log doesn't impact financial data on other payment entities.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

To access Commerce Payments entities, your org must have a Salesforce Order Management license with the Payment Platform org permission activated. Commerce Payments entities are available only in Lightning Experience.

Fields

Field	Details
`CurrencyIsoCode`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization.
`GatewayAuthCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Authorization approval code from the gateway.
`GatewayAvsCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Code sent by gateways that use an address verification system.
`GatewayDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date and time that of the gateway communication that lead to the creation of this gateway log.
`GatewayMessage`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description Information or error messages sent from the gateway.
GatewayRefNumber	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Unique transaction ID created by the payment gateway.
GatewayResultCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Gateway-specific result code. Must be mapped to a Salesforce-specific result code.
GatewayResultCodeDescription	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of the gateway's result code. This field is useful for providing more information around why the gateway returned a certain result code.
InteractionStatus	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Describes the result of communication between the payments platform and a payment gateway. Possible values are: • Failed • Initiated • NoOp • Success • Timeout
InteractionType	**Type** picklist

Field	Details
	Properties Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Describes the type of interaction with the gateway. This field is required for logs created in Salesforce. Possible values are: • `Authorization` • `AuthorizationReversal` • `Avs` • `Capture` • `CheckGiftCardBalance` • `ReferencedRefund` • `Sale` • `Tokenize` • `Void`
`IsNotification`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** For asynchronous transactions, shows whether the gateway log belongs to the notification (`yes`) or the initial transaction (`no`). Possible values are: • `No` • `Yes`
`OrderPaymentSummaryId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Order payment summaries show the balances of each authorization, capture, and refund made against an order.
`PaymentGatewayId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description The Payments Platform payment gateway record used for communication with the external payment gateway.
`PaymentGatewayLogNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** System-generated unique ID for this payment gateway log record.
`ReferencedEntityId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Foreign key with DomainSet of PaymentAuth and Payment.
`Request`	**Type** textarea **Properties** Create, Nillable, Update **Description** Raw payload. No sensitive attributes are stored.
`Response`	**Type** textarea **Properties** Create, Nillable, Update **Description** Raw payload.
`SfRefNumber`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** If an IdempotencyKey was passed in the API request, its value is stored here in text format.
`SfResultCode`	**Type** picklist

Field	Details
	Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Salesforce-specific result code that can map to one or more gateway result codes. We recommend configuring the payment gateway adapter layer to map gateway result codes to the appropriate Salesforce result code. Possible values are: • `Decline`: The gateway call failed, but it may still work if the transaction is attempted again. For example, the customer had insufficient funds or briefly lost their connection. • `Indeterminate`: The gateway didn't respond to the call. This response usually happens when Salesforce times out while waiting for a response from the gateway. • `PermanentFail`: The gateway call failed and won't work even if tried again. Gateway calls fail permanently for one of two reasons: – Hard Decline: The customer's payment account has been closed or terminated. – Fraud: The gateway recognized the payment or payment method as known fraud. • `RequiresReview`: The customer bank requires more information before completing the payment. • `Success`: The gateway call succeeded. • `SystemError`: Salesforce ended the payment request before receiving a response. For example, Salesforce lost credentials or access to its server. Salesforce ends payment calls if it doesn't receive a response from the gateway within two minutes. • `ValidationError`: Customer payment data was incorrect, such as a misspelling in the credit card address or an incorrect CVV.

PaymentGatewayProvider

Setup entity for payment gateways. Defines the connection to a payment gateway Apex adapter. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

To access Commerce Payments entities, your org must have a Salesforce Order Management license with the Payment Platform org permission activated. Commerce Payments entities are available only in Lightning Experience.

Fields

Field	Details
ApexAdapterId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The Apex adapter reference for your payment gateway. This field is unique within your organization.
Comments	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Users can add comments to provide additional details about a record. Maximum of 1000 characters.
DeveloperName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** (Optional) The username of the developer who configured the payment gateway. For reference only.
IdempotencySupported	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Defines whether the Payments Platform will charge the customer/merchant’s card multiple times for the same transaction if the same request is made in rapid succession. This can occur when a user clicks a Pay button twice, or if the gateway’s server goes down after fulfilling a payment request and the client immediately tries making another payment. If this field has a value of Yes, the Payments Platform ignores identical payment requests made immediately after an original request. Different payment gateways have varying levels of idempotency support. When configuring a new payment gateway integration, plan accordingly. Possible values are: • `No` • `Yes`

Field	Details
Language	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Customer language used for the payment gateway.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
MasterLabel	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Specifies the name of the payment gateway provider.
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Namespace for the payment gateway platform.

PaymentGroup

Top-level object that groups of all the payment transactions that have been processed an order or contract. PaymentGroup is a standalone object, so it isn't required for users to execute payment transactions (authorizations, captures, refunds, and sales). This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

To access Commerce Payments entities, your org must have a Salesforce Order Management license with the Payment Platform org permission activated. Commerce Payments entities are available only in Lightning Experience.

Fields

Field	Details
PaymentGroupNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** System-defined unique ID for the payment group.
SourceObjectId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The order or invoice related to all the payment transactions in the payment group.

PaymentLineInvoice

Represents a payment allocated to or unallocated from an invoice. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

To access Commerce Payments entities, your org must have a Salesforce Order Management license with the Payment Platform org permission activated. Commerce Payments entities are available only in Lightning Experience.

Fields

Field	Details
Amount	**Type** currency

Field	Details
	Properties Create, Filter, Sort **Description** Total amount applied or unapplied by this payment line.
AppliedDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort **Description** The date that this line was applied to an invoice or payment. If this field is null, it inherits the value of the payment line invoice's Date field.
AssociatedAccountId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The account for this payment line's target invoice.
AssociatedPaymentLineId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The paymentLine that was unapplied. Populated only when PaymentLineInvoice's Type field has a value of Unapplied.
Comments	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Users can add comments to provide additional details about a record. Maximum of 1000 characters.
Date	**Type** dateTime **Properties** Create, Filter, Nillable, Sort **Description** The date and time that this payment line was created.

Field	Details
`EffectiveDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort **Description** Defines the date and time when the payment line application or unapplication becomes effective.
`EffectiveImpactAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Shows how this payment invoice line impacts a customer's accounts receivable. This value is positive when PaymentLineInvoice's Type field is Applied, and negative when PaymentLineInvoice's Type is Unapplied. If there's an unapplied line related to this record, EffectiveImpactAmount has a value of 0. Note: EffectiveImpactAmount evaluates only the applied and unapplied line pair. Therefore, the effective impact amount could be different for different lines within the same payment.
`HasBeenUnapplied`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** Defines whether this payment line has been unapplied from the target invoice. Has a value of NA when PaymentInvoiceLine's Type field has a value of Unapplied. Can be No or Yes if Type has a value of Applied. Possible values are: • `NA` • `No` • `Yes`
`ImpactAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Shows the payment's financial impact against the customer's accounts receivable. If PaymentLineInvoice has a Type of Applied, the ImpactAmount is the negative equivalent of the line's Amount field. Otherwise, ImpactAmount equals Amount.

Field	Details
InvoiceId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Target invoice for this payment line.
PaymentBalance	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total balance of this line's parent payment record following the application or unapplication of this payment line.
PaymentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Parent payment for this payment line.
PaymentLineInvoiceNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** System-defined unique ID for this payment line.
Type	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** Defines whether this payment line has been applied or unapplied to the target invoice. Possible values are: • Applied • Unapplied
UnappliedDate	**Type** dateTime

Field	Details
	Properties Create, Filter, Nillable, Sort **Description** The date that this payment line was unapplied from the target invoice. Populated only when the Type field equals Unapplied. Inherits the value of the Date field.

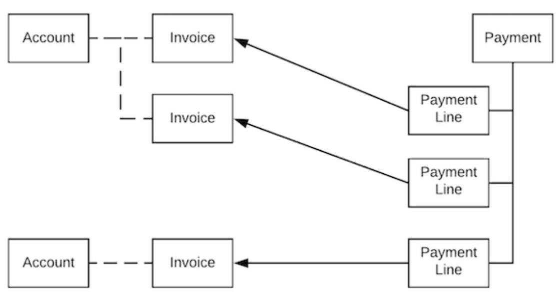
Usage

Use a payment line to apply all or part of a payment's balance to an invoice. The PaymentLineInvoice object represents the balance taken from the payment and applied toward the invoice. You can apply a payment's balance when you create the payment record or afterward. The payment line must have the same currency as the parent payment.

A payment line has an amount, which represents the total amount taken from the payment, and balance, which represents the remaining amount after the payment line has been applied to an invoice. A payment's amount can't be less than the sum of all of its payment line amounts.

One payment can have multiple payment lines. A payment line must be related to only payment.

You can create multiple payment lines on a payment apply each line to different invoices on the same account, or to invoices on different accounts.



Here's one way you could use Salesforce API to apply a payment to an invoice using a payment line.

PaymentMethod

The method that a buyer uses to compensate the seller of a good or service. Common payment methods include cash, checks, credit or debit cards, money orders, bank transfers, and online payment services. This object is available in API version 48.0 and later.

Supported Calls

`describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

To access Commerce Orders entities, your org must have a Salesforce Order Management license. Commerce Orders entities are available only in Lightning Experience.

Fields

Field	Details
AccountId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The account entity linked to this payment method.
Comments	**Type** textarea **Properties** Nillable **Description** Users can add comments to provide additional details about a record. Maximum of 1000 characters.
CompanyName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Company name for this payment method. Part of the payment method's address.
ImplementorType	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Shows the type of payment method.
Name	**Type** string **Properties** Filter, Group, idLookup, Sort

Field	Details
	Description Unique number assigned to the payment method. Numbers start at 1000 and are read only, but administrators can change the format.
NickName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** User-defined nickname for this payment method.
PaymentMethodAddress	**Type** address **Properties** Filter, Nillable **Description** Uses address column type. First name and last name are listed as separate fields.
PaymentMethodCity	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Part of the address for this payment method.
PaymentMethodCountry	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Part of the address for this payment method.
PaymentMethodGeocodeAccuracy	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Part of the address for this payment method.
PaymentMethodLatitude	**Type** double

Field	Details
	Properties Filter, Nillable, Sort **Description** Part of the address for this payment method.
PaymentMethodLongitude	**Type** double **Properties** Filter, Nillable, Sort **Description** Part of the address for this payment method.
PaymentMethodPostalCode	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Part of the address for this payment method.
PaymentMethodState	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Part of the address for this payment method.
PaymentMethodStreet	**Type** textarea **Properties** Filter, Group, Nillable, Sort **Description** Part of the address for this payment method.
Status	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The state of the payment method. Possible values are: • `Active`—The Payments Platform can use the payment method to make payments.

Field	Details
	• `Canceled`—The Payments Platform can no longer use the payment method to make payments. • `InActive`—The Payments Platform currently can't use the payment method to make payments. Admins can change this value to Active when needed.

PendingServiceRouting

Represents a work assignment that's waiting to be routed. This object is available in API version 40.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

To access this object, Omni-Channel must be enabled.

Fields

Field	Details
`CapacityPercentage`	**Type** percent **Properties** Create, Filter, Nillable, Sort, Update **Description** Indicates the amount of work that this item represents as a percentage. Valid values are 0–100.
`CapacityWeight`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Indicates the amount of work that this work item represents as a whole number.
`CustomRequestedDateTime`	**Type** dateTime

Field	Details
	Properties Create, Filter, Nillable, Sort, Update **Description** Retains the datetime of a work item's initial request, so work items are rerouted using the datetime of the initial work request. When left blank, work items are rerouted using the datetime when they were rerouted.
DropAdditionalSkillsTimeout	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The period of time to wait before a skill marked as additional is dropped from Omni-Channel routing. The case is then routed to the best-matched agent even if they don't have all the skills.
GroupId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the Omni-Channel queue.
IsOwnerChangeInitiated	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a work item owner change triggered the direct assignment of the work item to the agent. The default value is false.
IsPreferredUserRequired	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Indicates whether a work item should stay with the preferred user even when the user is not available, The default value is false. This field is available in API version 50.0 and later.
IsPushAttempted	**Type** boolean

Field	Details
	Properties Defaulted on create, Filter, Group, Sort **Description** Indicates whether a push has been attempted. `true` if an agent was chosen at least once to route this `PendingServiceRouting`; `false` otherwise.
`IsPushed`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the `PendingServiceRouting` is pushed to an agent.
`IsReadyForRouting`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the work item is ready to be routed to an agent. You can't edit a PendingServiceRouting object that is set to *True*.
`IsStatusChangeInitiated`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a work item status change triggered the direct assignment of the work item to the agent. The default value is false. This field is available in API version 50.0 and later.
`IsTransfer`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this `PendingServiceRouting` is a transfer request.
`LastDeclinedAgentSession`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description Chat Session ID of the agent who last declined this work item.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** Name of the `PendingServiceRouting`.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the owner of this `PendingServiceRouting`.
PreferredUserId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the preferred user to handle the work.
PushTimeout	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The number of seconds set for push timeout. *0* is returned when push timeout isn't enabled. Available in API version 36.0 and later.
QueueId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the Omni-Channel queue. Due to API changes, QueueId is no longer recommended. Use GroupId instead.
RoutingModel	**Type** picklist

Field	Details
	Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Type of routing model. For a queue configured with a queue routing configuration, the routing model is `ExternalRouting` for all external routing `PendingServiceRouting`.
`RoutingPriority`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The order in which work items are routed to agents.
`RoutingType`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Indicates whether the work item is routed by queue or by skills-based routing. Valid values are `QueueBased` and `SkillsBased`.
`SecondaryRoutingPriority`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates the secondary routing priority.
`Serial`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Serial number of the `PendingServiceRouting`. The serial number is automatically incremented each time the `PendingServiceRouting` is modified.
`ServiceChannelId`	**Type** reference **Properties** Create, Filter, Group, Sort

Field	Details
	Description ID of the Service Channel.
`WorkItemId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the work item.

Usage

When you use `PendingServiceRouting` objects for queue-based routing, the `PendingServiceRouting` objects don't invoke triggers before or after insert, or any action (trigger, workflow rule, validation) that could interfere with the creation of the PendingServiceRouting object.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

PendingServiceRoutingOwnerSharingRule
Sharing rules are available for the object.

PendingServiceRoutingShare
Sharing is available for the object.

Period

Represents a fiscal period defined in FiscalYearSettings.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

As of Spring '20 and later, only Chatter Free users and standard users can access this object.

Fields

Field	Details
`EndDate`	**Type** date **Properties** Filter, Group, Sort **Description** The last date of the fiscal period.
`FiscalYearSettingsId`	**Type** reference **Properties** Filter, Nillable, Group, Sort **Description** The parent record for this period.
`FullyQualifiedLabel`	**Type** string **Properties** Group, Nillable **Description** Represents the period's complete name in the UI. For example, "September FY 2016".
`IsForecastPeriod`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the period is associated with Collaborative Forecasts (`true`) or not (`false`).
`Number`	**Type** int **Properties** Filter, Nillable, Group, Sort **Description** If the labeling scheme of your fiscal year's quarters or months is numbered, this field indicates the relative number of the row.
`PeriodLabel`	**Type** picklist

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** If the months in your fiscal year use custom names, then this field contains the appropriate name for rows of type Month.
`QuarterLabel`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** If the quarters in your fiscal year use custom names, then this field contains the appropriate name for rows of type Quarter.
`StartDate`	**Type** date **Properties** Filter, Group, Sort **Description** The first date of the fiscal period.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Indicates whether the period is of type Month, Quarter, Week, or Year. Label is the field value.

Usage

In API version 36.0 and earlier, querying the Period object yields no results. In API version 37.0 and later, a query returns period records.

SEE ALSO:

FiscalYearSettings

PermissionSet

Represents a set of permissions that's used to grant more access to one or more users without changing their profile or reassigning profiles. This object is available in API version 22.0 and later.

PermissionSet has a read-only child relationship with PermissionSetGroup. PermissionSet contains the aggregated permissions for the group.

You can use permission sets to grant access, but not to deny access.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

As of Summer '20 and later, only users who have one of these permissions can access this object:

- View Setup and Configuration
- Manage Session Permission Set Activations
- Assign Permission Sets
- Manage Profiles and Permission Sets

To view the following settings, assignments, and permissions for standard and custom objects in a specified permission set, the View Setup and Configuration permission is required.

- Client settings
- Field permissions
- Layout assignments
- Object permissions
- Permission dependencies
- Permission set tab settings
- Permission set group components
- Record types

Fields

Field Name	Details
`Description`	**Type** string **Properties** Create, Filter, Nillable, Group, Sort, Update **Description** A description of the permission set. Limit: 255 characters.
`HasActivationRequired`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the permission set requires an associated active session (`true`) or not (`false`).

Field Name	Details
IsCustom	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, the permission set is custom (created by an admin); if `false`, the permission set is standard and related to a specific permission set license.
IsOwnedByProfile	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, the permission set is owned by a profile. Available in API version 25.0 and later.
Label	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The permission set label, which corresponds to **Label** in the user interface. Limit: 80 characters.
LicenseId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of either the related PermissionSetLicense or UserLicense associated with this permission set. Available in API version 38.0 and later. Use this field instead of `UserLicenseId`, which is deprecated and only available up to API Version 37.0.
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your organization. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. Corresponds to **API Name** in the user interface. Limit: 80 characters.

Field Name	Details
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix for a permission set that's been installed as part of a managed package. If the permission set isn't packaged or is part of an unmanaged package, this value is empty. Available in API version 23.0 and later.
Permissions*PermissionName*	**Type** boolean **Properties** Create, Filter, Update **Description** One field for each permission. If `true`, users assigned to this permission set have the named permission. The number of fields varies depending on the permissions for the organization and license type. Tip: To get a list of available permissions in the SOAP API, use `describeSObjects()`.
PermissionSetGroupId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** If the permission set is owned by a permission set group, this field returns the ID of the permission set group. If the permission set isn't owned by a permission set group, this field returns a null value. Available in API version 45.0 and later.
ProfileId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** If the permission set is owned by a profile, this field returns the ID of the Profile. If the permission set isn't owned by a profile, this field returns a null value. Available in API version 25.0 and later.
Type	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description Available in API version 46.0 and later.
`UserLicenseId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the UserLicense associated with this permission set. This field is nillable in API version 26.0 and later and available up to API version 37.0 In API version 38.0 and later, use `LicenseId`.

Usage

Use the PermissionSet object to query existing permission sets.

For example, to search for all permission sets that contain the "Modify All Data" permission:

```
SELECT Name, PermissionsModifyAllData
FROM PermissionSet
WHERE PermissionsModifyAllData=true
```

When combined with the PermissionSetAssignment object, you can create a nested query that returns all users assigned to a particular permission like "Modify All Data":

```
SELECT Name, (SELECT AssigneeId FROM Assignments)
FROM PermissionSet
WHERE PermissionsModifyAllData=true
```

If the permission set isn't assigned to a user, you can also create or delete a permission set.

User Licenses

The user license controls the permissions that are available in a permission set.

Every permission set can be associated with a user license or permission set license. If you plan to assign a permission set to multiple users with different user and permission set licenses, leave `LicenseId` empty. If only users with one type of license use this permission set, set the `LicenseId` to that single user or permission set license. If you want a permission set associated with a permission set license, then set `LicenseId` to the permission set license. To get the `LicenseId`, run this query:

```
SELECT Id, Name
FROM UserLicense
```

Alternatively, to query a user or profile for the `LicenseId`.

```
SELECT Id, Profile.UserLicenseId
FROM User
```

Child Objects

When using the API, think of each permission set or related set of access controls as an empty container that you fill with permission records.

In the API, a permission set can contain user, object, and field permissions, and setup entity access settings for other settings, such as Apex classes.

- ObjectPermissions and FieldPermissions objects are available in API version 24.0 and later.
- The SetupEntityAccess object is available in API version 25.0 and later.
- The PermissionSetGroupComponent object is available in API version 45 and later.

Only user permissions are managed in the PermissionSet API object; all other permission types are managed in child API objects.

In these child objects, access is stored in a record, while the absence of a record indicates no access. To return a record in a SOQL query, a minimum permission or setting is required for each child object.

Because permissions are stored in related objects, it's important to understand what questions to ask when using SOQL. For example, let's say you want to know which permission sets have "Delete" on an object. You also want to know which ones include permissions that allow approval of a return merchandise authorization (where the approval checkbox is controlled with field permissions). Asking the right questions when using SOQL with permission sets ensures that you get the information you need, such as whether to migrate permissions or assign a permission set to a user.

For example, the following returns all permission sets where the "Read" permission is enabled for the Merchandise__c object.

```
SELECT SobjectType, ParentId, PermissionsRead
FROM ObjectPermissions
WHERE PermissionsRead = True AND SobjectType = 'Merchandise__c'
```

You can query for all permission sets that have "Read" on an object. However, you can't query for permission sets that have no access on an object, because no records exist for that object. For example, the following returns no records because the object must have at least "Read" to return any records.

```
SELECT SobjectType, ParentId, PermissionsRead
FROM ObjectPermissions
WHERE PermissionsRead = False AND SobjectType = 'Merchandise__c'
```

If you have at least the "Read" permission on an object, you can create a conditional query on other permissions in the same object. For example, the following returns any records where the object has at least the "Read" permission but not the "Edit" permission.

```
SELECT ParentId, PermissionsRead, PermissionsEdit
FROM ObjectPermissions
WHERE PermissionsEdit = False AND SobjectType = 'Merchandise__c'
```

To set an object or field permission to no access, delete the record that contains the permission. For example, to disable all object permissions in the Merchandise__c object for a particular permission set, first query to retrieve the ID of the object permission record.

```
SELECT Id
FROM ObjectPermissions
WHERE SobjectType = 'Merchandise__c'
```

Then delete the IDs returned from the query.

Note: If you try to update the object or field permissions by setting all permissions to false, the permission record is automatically deleted. Any subsequent queries for the record ID won't return results and you must add a new permission record to grant access.

View a Permission Set with Nested Queries

You can build on the PermissionSet object using child relationships that show all of the permissions in a single permission set. For example, the following returns all permission sets and displays the “Transfer Leads” permission, as well as any “Read” permissions on any objects and fields.

```
SELECT Label, PermissionsTransferAnyLead,
(SELECT SobjectType, PermissionsRead FROM ObjectPerms),
(SELECT SobjectType, Field, PermissionsRead FROM FieldPerms)
FROM PermissionSet
```

Associated Profiles

In API version 25.0 and later, every profile is associated with a permission set that stores the profile’s user, object, and field permissions, as well as setup entity access settings. You can query permission sets that are owned by profiles but not modify them.

The following example returns all permission sets, including those owned by a profile.

```
SELECT Id, Label, ProfileId, Profile.Name
FROM PermissionSet
```

The following returns all permission sets except those permissions owned by profiles.

```
SELECT Id, Label, ProfileId, Profile.Name, IsOwnedByProfile
FROM PermissionSet
WHERE IsOwnedByProfile = FALSE
```

Because permission sets have child objects in the API, you can query their values on permission sets owned by a profile. For example, the following returns all enabled object permission records for profiles only.

```
SELECT Id,ParentId, PermissionsRead, SobjectType, Parent.ProfileId
FROM ObjectPermissions
WHERE Parent.IsOwnedByProfile = TRUE
```

Once you have the IDs for permission sets that are owned and not owned by profiles, use the PermissionSetAssignment object to see if users can access objects or fields via their profile permissions or their permission sets. For example, the following SOQL query returns all users who have the “Read” permission on the Merchandise__c object. It also specifies whether the permission is granted through a profile or permission set.

```
SELECT Assignee.Name, PermissionSet.Id, PermissionSet.isOwnedByProfile
FROM PermissionSetAssignment
WHERE PermissionSetId
IN (SELECT ParentId
FROM ObjectPermissions
WHERE SObjectType = 'Merchandise__c' AND PermissionsRead = true)
```

Note: For permission sets that are owned by profiles, don't use Name and Label values that are returned in a query. Name and Label values from queries can change.

SEE ALSO:

ObjectPermissions

FieldPermissions

SetupEntityAccess

PermissionSetAssignment

Profile

PermissionSetAssignment

Represents the association between a User and a PermissionSet. This object is available in API version 22.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

As of Summer '20 and later, only users who have one of these permissions can access this object:

- View Setup and Configuration
- Assign Permission Sets
- Manage User

Fields

Field Name	Details
`AssigneeId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the User to assign the permission set specified in `PermissionSetId`.
`PermissionSetGroupId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort

Field Name	Details
	Description If associated with a permission set group, this is the ID of that group. This field is available in API version 45.0 and later as part of a pilot. Refer to PermissionSetGroup for more information.
`PermissionSetId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the PermissionSet to assign to the user specified in `AssigneeId`.

Usage

Finding Permission Set Assignments

Use the PermissionSetAssignment object to query permission set assignments to find out which permission sets are assigned to which users. Because each user can be assigned to many permission sets and each permission set can be assigned to many users, each PermissionSetAssignment ID represents the association of a single user and single permission set.

For example, to search for all permission sets assigned to a particular user:

```
SELECT Id, PermissionSetId
FROM PermissionSetAssignment
WHERE AssigneeId = '005600000017cKt'
```

To search for all users assigned to a particular permission set:

```
SELECT Id, AssigneeId
FROM PermissionSetAssignment
WHERE PermissionSetId = '0PS30000000000e'
```

You can also create a new permission set assignment, or use delete to remove a permission set that's assigned to a user. To update an assignment, delete an existing assignment and insert a new one.

User Licenses

When assigning a permission set, if the PermissionSet has a `UserLicenseId`, its `UserLicenseId` and the Profile `UserLicenseId` must match. To determine a user's license assignment, query the user's profile and then query the profile's license.

For example, to find a user's profile ID:

```
SELECT Id, ProfileId
FROM User
WHERE Id = '005D0000001GMAT'
```

To find a permission set's `UserLicenseId`:

```
SELECT Id, LicenseId
FROM PermissionSet
WHERE Id = '0PS30000000000e'
```

If the IDs match, the assignment succeeds.

To find all the permission sets with no license that are assigned to any user:

```
SELECT Id, Assignee.Name, PermissionSet.Name
FROM PermissionSetAssignment
WHERE PermissionSet.LicenseId = null
```

SEE ALSO:

PermissionSet

PermissionSetGroup

Represents a group of permission sets and the permissions within them. Use permission set groups to organize permissions based on job functions or tasks. Then, you can package the groups as needed. This object is available in API version 45.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObject()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Summer '20 and later, only users who have one of these permissions can access this object:

- View Setup and Configuration
- Manage Session Permission Set Activations
- Assign Permission Sets

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The Permission Set Group description.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The permission set group name used in the API.

Field Name	Details
Language	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The Permission Set Group language. Possible values are: • da (Danish) • de (German) • en_US (English) • es (Spanish) • es_MX (Spanish - Mexican) • fi (Finnish) • fr (French) • it (Italian) • ja (Japanese) • ko (Korean) • nl_NL (Dutch) • no (Norwegian) • pt_BR (Portuguese - Brazilian) • ru (Russian) • sv (Swedish) • th (Thai) • zh_CN (Chinese - Simplified) • zh_TW (Chinese - Traditional)
MasterLabel	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The permission set group label for the aggregated permissions.
NameSpacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The permission set group namespace prefix.

Field Name	Details
`Status`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Indicates permission set group recalculation status. • `Updated`. The group is current. • `Outdated`. The group requires recalculation. • `Updating`. The group is in recalculation mode. • `Failed`. The group recalculation failed.

Usage

Use the PermissionSetGroup object to query existing permission set groups and to find which aggregated permissions are included in the group.

For example, to search for all object permissions in a permission set group named StandardAccountingUsers:

```
SELECT SObjectType
FROM ObjectPermissions
WHERE Parent.PermissionSetGroup.DeveloperName = 'StandardAccountingUsers'
```

To create a permission set group using REST API, you can submit a POST request.

```
POST
/services/data/v45.0/tooling/sobjects/PermissionSetGroup/

{
    "DeveloperName":"Sales", "MasterLabel": "sales_label"
}
```

PermissionSetGroupComponent

A junction object that relates the PermissionSetGroup and PermissionSet objects via their respective IDs; enables permission set group recalculation to determine the aggregated permissions for the group. This object is available in API version 45.0 and later.

PermissionSetGroupComponent is a child object of PermissionSet and PermissionSetGroup.

Supported Calls

`create()`, `delete()`, `describeSObject()`, `query()`, `retrieve()`

Special Access Rules

As of Spring '20 and later, only users with the "View Setup and Configuration" permission can access this object.

Fields

Field Name	Details
`PermissionSetGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The unique permission set group ID.
`PermissionSetId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The unique permission set ID of a permission set in a permission set group.

Usage

Use the PermissionSetGroupComponent object to add members to or delete members from a permission set group, or to query for group members.

PermissionSetLicense

Represents a license that's used to enable one or more users to receive a specified permission without changing their profile or reassigning profiles. You can use permission set licenses to grant access, but not to deny access. This object is available in API version 29.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

As of Spring '20 and later, only your Salesforce org's internal users can access this object.

Fields

Field Name	Details
`DeveloperName`	**Type** string

Field Name	Details
	Properties Filter, Group, Sort **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`ExpirationDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** The date at which the permission set license expires.
`Language`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language of the permission set license.
`MasterLabel`	**Type** string **Properties** Filter, Group, Sort **Description** The label of the permission set license. Label is **Permission Set License Label**.
`MaximumPermissions`*`PermissionName`*	**Type** boolean **Properties** Filter, **Description** One field for each permission. For example, `MaximumPermissionsIdentityConnect` corresponds to the "Use Identity Connect" permission.

Field Name	Details
	If `true`, this PermissionSetLicense grants the specified permission. The number of fields varies depending on the permissions available for the organization.
MaximumPermissionsShowCompanyNameAsUserBadge	**Type** boolean **Properties** Filter **Description** When on, a user's company name, if available, will be displayed in place of the community role.
PermissionSetLicenseKey	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** A string that uniquely identifies a particular permission set license.
Status	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The status of a permission set license. If `Active`, the permission set license is available. If `Disabled`, the permission set license has expired.
TotalLicenses	**Type** int **Properties** Filter, Group, Sort **Description** The total number of this permission set license that are available to your organization.
UsedLicenses	**Type** int **Properties** Filter, Group, Sort **Description** The number of this permission set license that are currently assigned to users.

Usage

Users with the "View Setup and Configuration" permission can use the PermissionSetLicense object to view the set of currently defined permission set licenses in your organization.

Use the PermissionSetLicense object to query existing permission licenses.

For example, to return a list of all active permission set licenses:

```
SELECT MasterLabel
FROM PermissionSetLicense
WHERE Status = 'Active'
```

When combined with the PermissionSetLicenseAssign object, you can create a nested query that returns all users assigned to a particular permission set license like "Identity Connect":

```
SELECT MasterLabel, (SELECT AssigneeId FROM PermissionSetLicenseAssignments)
FROM PermissionSetLicense
WHERE MaximumPermissionsIdentityConnect=true
```

SEE ALSO:

PermissionSetLicenseAssign

PermissionSetLicenseAssign

Represents the association between a User and a PermissionSetLicense. This object is available in API version 29.0 and later.

Note: The relationship name for PermissionSetLicenseAssign is *`PermissionSetLicenseAssignments`*.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

As of Summer '20 and later, only users who have one of these permissions can access this object:

- View Setup and Configuration
- Assign Permission Sets

Fields

Field Name	Details
`AssigneeId`	**Type** reference **Properties** Create, Filter, Group, Sort

Field Name	Details
	Description ID of the User to assign the permission set license specified in `PermissionSetLicenseId`.
`PermissionSetLicenseId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the permission set license the user is assigned to.

Usage

Use the PermissionSetLicenseAssign object for querying permission set license assignments to find out which permission set licenses are assigned to which users. Because each user can be assigned to many permission set licenses, each PermissionSetLicenseAssign ID represents the association of a single user and single permission set license.

For example, to search for all of the permission sets assigned to a particular user:

```
SELECT Id, PermissionSetLicenseId
FROM PermissionSetLicenseAssign
WHERE AssigneeId = '005D0000001RFek'
```

To search for all users assigned to a particular permission set license:

```
SELECT AssigneeId
FROM PermissionSetLicenseAssign
WHERE PermissionSetLicenseId = '0PLD000000003mwOAA'
```

You can also create a new permission set license assignment, or use delete to remove a permission set license that's been assigned to a user. To update an assignment, delete an existing assignment and insert a new one.

SEE ALSO:

PermissionSetLicense

PermissionSetTabSetting

Represents a permission set tab setting. Requires the View Setup permission. Use this object to query all tab settings of the permission set. This object is available in API version 45.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Spring '20 and later, only users with "View Setup and Configuration" permission can access this object.

Fields

Field Name	Details
Name	**Type** string **Properties** Create, Filter, Group, Sort **Description** The tab name.
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The permission set Id.
Visibility	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Indicates whether the tab is visible by default. Possible values are: • DefaultOff • DefaultOn

Usage

Use the PermissionSetTabSetting object to find tab setting visibility settings, parent permission sets, and so forth.

For example, to find the visibility setting of a tab named “standard-Lead,” do something like the following.

```
SELECT Visibility
FROM PermissionSetTabSetting
WHERE Name = 'standard-Lead'
```

PersonalizationTargetInfo

Represents a target for an audience. This object is available in API version 47.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`ContainerId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the Experience Cloud site or org that contains the target.
`DraftRowId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the draft PersonalizationTargetInfo.
`GroupName`	**Type** string **Properties** Filter, Group, Sort **Description** Group name of the target. Groups bundle related targets.You can have up to 2,000 groups and 500 targets per group.
`PublishStatus`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Publish status of the target. Possible values are: • `Draft` • `Live`
`TargetType`	**Type** picklist

Field	Details
	Properties Filter, Group, Restricted picklist, Sort **Description** The type of the target. Possible values are: • `ExperienceVariation` • `NavigationLinkSet` • `Topic` • `CollaborationGroup` • `KnowledgeArticle` • `ContentDocument` • `ManagedContent` • `Report` • `Dashboard` • Custom objects You can have up to 2,500 `ExperienceVariation` targets and 25,000 record targets.
`TargetValue`	**Type** string **Properties** Filter, Group, Sort **Description** Value of the target. For ExperienceVariation, this is the developer name of the Experience Variation or the record ID for the object.

PlatformAction

PlatformAction is a virtual read-only object. It enables you to query for actions displayed in the UI, given a user, a context, device format, and a record ID. Examples include standard and custom buttons, quick actions, and productivity actions.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field	Details
`ActionListContext`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Required. The list context this action applies to. Valid values are: • `ActionDefinition` • `Assistant` • `BannerPhoto` • `Chatter` • `Dockable` • `FeedElement` • `Flexipage` • `Global` • `ListView` • `ListViewDefinition` • `ListViewRecord` • `Lookup` • `MruList` • `MruRow` • `ObjectHomeChart` • `Photo` • `Record` • `RecordEdit` • `RelatedList` • `RelatedListRecord`
`ActionTarget`	**Type** textarea **Properties** Nillable **Description** The URL to invoke or describe the action when the action is invoked. If the action is a standard button overridden by a Visualforce page, the ActionTarget returns the URL of the Visualforce page, such as `/apex/pagename`. This field is available in API version 35.0 and later.

Field	Details
ActionTargetType	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of the target when this action is triggered. Valid values are: • Describe—applies to actions with a user interface, such as quick actions • Invoke—applies to actions with no user interface, such as action links or invocable actions • Visualforce—applies to standard buttons overridden by a Visualforce page
ActionTargetUrl	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL to invoke or describe the action when the action is invoked. This field is deprecated in API version 35.0 and later. Use ActionTarget instead.
Category	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Applies only to action links. Denotes whether the action link shows up in the feed item list of actions or the overflow list of actions. Valid values are: • Primary • Overflow
ConfirmationMessage	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Applies only to action links. The message to display before the action is invoked. Field is null if no confirmation is required before invoking the action.
DeviceFormat	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort

Field	Details
	Description Specifies which action icon the PlatformAction query returns. If this field isn't specified, it defaults to Phone. Valid values are: • `Aloha` • `Desktop` • `Phone` • `Tablet`
`ExternalId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The unique ID for the PlatformAction. If the action doesn't have an ID, its API name is used.
`GroupId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The unique ID of a group of action links.
`IconContentType`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The content type—such as .jpg, .gif, or .png—of the icon for this action. Applies to both custom and standard icons assigned to actions.
`IconHeight`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The height of the icon for this action. Applies only to standard icons.
`IconUrl`	**Type** url **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The URL of the icon for this action.
`IconWidth`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The width of the icon for this action. Applies only to standard icons.
`InvocationStatus`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The status of the action within the feed item. Applies to action links only. Valid values are: • `Failed` • `New` • `Pending` • `Successful`
`InvokedByUserId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the user who most recently invoked this action within the current feed item. Applies to action links only.
`IsGroupDefault`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Denotes whether this action is the default in an action link group. False for other action types. Applies to action links only.
`IsMassAction`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field	Details
	Description Indicates whether the action can be performed on multiple records. This field is available in API version 38.0 and later.
`Label`	**Type** string **Properties** Filter, Group, Sort **Description** The label to display for this action.
`PrimaryColor`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The primary color of the icon for this action.
`RelatedListRecordId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Represents the ID of a record in an object's related list. This field is available in API version 38.0 and later.
`RelatedSourceEntity`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** When the `ActionListContext` is RelatedList or RelatedListRecord, this field represents the API name of the related list to which the action belongs.
`Section`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The section of the user interface the action resides in. Applicable only to Lightning Experience. Valid values are:

Field	Details
	• ActivityComposer • CollaborateComposer • NotesComposer • Page • SingleActionLinks This field is available in API version 35.0 and later.
`SourceEntity`	**Type** string **Properties** Filter, Group, Sort **Description** Required. The object or record with which this action is associated.
`Subtype`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The subtype of the action. For quick actions, the subtype is `QuickActionType`. For custom buttons, the subtype is `WebLinkTypeEnum`. For action links, subtypes are `Api`, `ApiAsync`, `Download`, and `Ui`. Standard buttons and productivity actions have no subtype.
`TargetObject`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The type of object record the action creates, such as a contact or opportunity. This field is available in API version 41.0 and later.
`TargetUrl`	**Type** string **Properties** Filter, Nillable, Sort **Description** The URL that a custom button or link points to. This field is available in API version 41.0 and later.

Field	Details
Type	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of the action. Valid values are: • `ActionLink`—An indicator on a feed element that targets an API, a web page, or a file, represented by a button in the Salesforce Chatter feed UI. • `CustomButton`—When clicked, opens a URL or a Visualforce page in a window or executes JavaScript. • `InvocableAction` • `ProductivityAction`—Productivity actions are predefined and attached to a limited set of objects. Productivity actions include Send Email, Call, Map, View Website, and Read News. Except for the Call action, you can't edit productivity actions. • `QuickAction`—A global or object-specific action. • `StandardButton`—A predefined Salesforce button such as New, Edit, and Delete.

Usage

PlatformAction can be described using describeSObject().

You can directly query for PlatformAction. For example, this query returns all fields for actions associated with each of the records of the listed objects:

```
SELECT ExternalId, ActionTargetType, ActionTargetUrl, ApiName, Category,
      ConfirmationMessage, ExternalId, GroupId, UiTheme, IconUrl, IconContentType,
      IconHeight, IconWidth, PrimaryColor, InvocationStatus, InvokedByUserId,
      IsGroupDefault, Label, LastModifiedDate, Subtype, SourceEntity, Type
FROM PlatformAction
WHERE SourceEntity IN ('001xx000003DGsH', '001xx000003DHBq', 'Task') AND
      ActionListContext = 'Record';
```

Note: To query PlatformAction, provide the `ActionListContext` and `SourceEntity`. If you query for `ActionListContext` with a value of `RelatedList`, and don't specify a `RelatedSourceEntity`, the query returns the API name of the related list. In API v43.0 and before, `SourceEntity = '`***`Object API Name`***`' and ActionListContext = 'ListView'` is an invalid combination to fetch quick actions in a SOQL query. Use `SourceEntity = '`***`Object ID`***`' and ActionListContext = 'ListView'` instead.

This query uses multiple `ActionListContext` values in its `WHERE` clause to return all actions in the Lightning Experience user interface (`DeviceFormat = 'Desktop'`) for the specified object:

```
SELECT ActionListContext, Label, Type, Subtype, Section, SourceEntity,
     RelatedSourceEntity, ActionTarget, ActionTargetType, ApiName, Category,
     ConfirmationMessage, DeviceFormat, ExternalId, GroupId, IconContentType,
     IconHeight, IconUrl, IconWidth, Id, InvocationStatus, InvokedByUserId,
     IsGroupDefault, LastModifiedDate, PrimaryColor
FROM PlatformAction
```

```
WHERE ActionListContext IN ('Record','Chatter','RelatedList') AND
      SourceEntity = '001xx000003DlvX' AND
      DeviceFormat = 'Desktop'
```

PlatformEventUsageMetric

Contains usage data for event publishing and CometD-client delivery. Usage data is available for the last 24 hours, ending at the last hour, and for historical daily usage. PlatformEventUsageMetric contains separate usage metrics for platform events and change data capture events. This object is available in API version 50.0 and later.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field	Details
`EndDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The end date and time in UTC used for querying usage metrics. The date granularity is hourly. To get usage data for the last 24 hours, the end date is the current date in UTC. The time is the current time in UTC rounded down to the previous hour. For example, 11:23 is 11:00 and the date format is: 2020-08-04T11:00:00.000Z To get historical data, the end date in UTC is the end of the date range with hours specified as 0. For example: 2020-08-04T00:00:00.000Z. To query a date range, you can use the > or >= operators. For the date format to use, see Date Formats and Date Literals in the *SOQL and SOSL Reference*.
`ExternalId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** This field is not in use.
`Name`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort

Field	Details
	Description The name of the metric to get usage for. Possible values are: • CHANGE_EVENTS_DELIVERED—Number of change data capture events delivered to CometD clients • CHANGE_EVENTS_PUBLISHED—Number of change data capture events published • PLATFORM_EVENTS_DELIVERED—Number of platform events delivered to CometD clients • PLATFORM_EVENTS_PUBLISHED—Number of platform events published
StartDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The start date and time in UTC used for querying usage metrics. The date granularity is hourly. To get usage data for the last 24 hours, the start date is the previous day in UTC. The time is the current time in UTC rounded down to the previous hour. For example, 11:23 is 11:00 and the date format is: 2020-08-03T11:00:00.000Z To get historical data, the start date is the start of the date range with hours specified as 0. For example: 2020-08-03T00:00:00.000Z. To specify a date range, you can use the > or >= operators. For the date format to use, see Date Formats and Date Literals in the *SOQL and SOSL Reference*.
Value	**Type** long **Properties** Filter, Group, Nillable, Sort **Description** The usage value for the specified metric and date range.

Usage

For more information, see Monitor Platform Event Publishing and Delivery Usage in the *Platform Events Developer Guide*.

PlatformStatusAlertEvent

The documentation has moved to PlatformStatusAlertEvent in the *Platform Events Developer Guide*.

PortalDelegablePermissionSet

PortalDelegablePermissionSet is a base platform object used to store permission sets that can be assigned by a delegated portal/external user admin (DPUA) to portal users. This object is available in API version 47.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. The unique string used to identify the record.
`Language`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language used in the org.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. The unique string to identify the record.
`PermissionSetId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The unique ID of the permission set the DPUA profile can assign to other portal users.
`ProfileId`	**Type** reference

Field	Details
	Properties Create, Filter, Group, Sort, Update **Description** The ID of the DPUA profile.

PresenceConfigDeclineReason

Represents the settings for a decline reason that a presence user provides when declining work. This object is available in API version 37.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `update()`, `query()`, `retrieve()`

Special Access Rules

To access this object, Omni-Channel must be enabled.

As of Spring '20 and later, only authenticated internal and external users can access this object.

Fields

Field	Details
`PresenceDeclineReasonId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the PresenceDeclineReason record.
`PresenceUserConfigId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the PresenceUserConfig record where the decline reasons are added.

PresenceDeclineReason

Represents an Omni-Channel decline reason that agents can select when declining work requests. This object is available in API version 37.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `update()`, `query()`, `retrieve()`

Special Access Rules

To access this object, Omni-Channel must be enabled.

As of Spring '20 and later, only authenticated internal and external users can access this object.

Fields

Field	Details
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`Language`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The language of the PresenceDeclineReason.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort

Field	Details
	Description The master label for the PresenceDeclineReason.

PresenceUserConfig

Represents a configuration that determines a presence user's settings. This object is available in API version 32.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `update()`, `query()`, `retrieve()`

Special Access Rules

To access this object, Omni-Channel must be enabled.

As of Spring '20 and later, only authenticated internal and external users can access this object.

Fields

Field	Details
`Capacity`	**Type** int **Properties** Create, Filter, Group, Sort **Description** The maximum number of work assignments that can be pushed to an agent at a time.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.

Field	Details
Language	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The language of the presence configuration.
MasterLabel	**Type** string **Properties** Create, Filter, Group, Sort **Description** The label of the presence configuration.
OptionsIsAutoAcceptEnabled	**Type** boolean **Properties** Create, Filter **Description** Indicates whether work items that are routed to agents are automatically accepted (`true`) or not (`false`). Available only if `OptionsIsDeclineEnabled` is set to `false`.
OptionsIsDeclineEnabled	**Type** boolean **Properties** Create, Filter **Description** Indicates whether agents can decline work items that are routed to them (`true`) or not (`false`). Available only if `OptionsIsAutoAcceptEnabled` is set to `false`.
OptionsIsDeclineReasonEnabled	**Type** boolean **Properties** Create, Filter **Description** Indicates whether agents can select a reason for declining work requests (`true`) or not (`false`). This can be selected only if decline reasons are enabled.
OptionsIsDisconnectSoundEnabled	**Type** boolean **Properties** Create, Filter

Field	Details
	Description Indicates whether a sound is played when agents are disconnected from Omni-Channel (`true`) or not (`false`).
`OptionsIsRequestSoundEnabled`	**Type** boolean **Properties** Create, Filter **Description** Indicates whether a sound plays with incoming work requests (`true`) or not (`false`). Set to `true` by default.
`PresenceStatusOnDeclineId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the presence status that's automatically assigned to the agent when the agent declines a work item. Available only if `OptionsIsDeclineEnabled` is set to `true`.
`PresenceStatusOnPushTimeoutId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the presence status that's automatically assigned to the agent when the agent doesn't respond to a work item before push timeout occurs. Available in API version 36.0 and later.

PresenceUserConfigProfile

Represents a configuration that determines the settings that are assigned to presence users who are assigned to a specific profile. User-level configurations override profile-level configurations. This object is available in API version 32.0 and later.

Supported Calls

`create()`, `delete()`, `query()`, `update()`, `retrieve()`

Special Access Rules

To access this object, Omni-Channel must be enabled.

As of Spring '20 and later, only authenticated internal and external users can access this object.

Fields

Field	Details
`PresenceUserConfigId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** If an individual user is also assigned a presence configuration through the PresenceUserConfigProfile, this configuration will override that.
`ProfileId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the profile that's associated with this presence configuration. A profile can be associated with only one presence configuration.

PresenceUserConfigUser

Represents a configuration that determines the settings that are assigned to a presence user. These user-level configurations override profile-level configurations. This object is available in API version 32.0 and later.

Supported Calls

`create()`, `delete()`, `query()`, `update()`, `retrieve()`

Special Access Rules

To access this object, Omni-Channel must be enabled.

As of Spring '20 and later, only authenticated internal and external users can access this object.

Fields

Field	Details
`PresenceUserConfigId`	**Type** reference

Field	Details
	Properties Create, Filter, Group, Sort **Description** The ID of the presence configuration.
UserId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the user who's associated with this presence configuration. A user can be associated with only one presence configuration.

PriceAdjustmentSchedule

Represents a series of tiered discounts based on the number of items purchased. This object is available in API version 47.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is available only if the B2B Commerce license is enabled.

Fields

Field	Details
AdjustmentMethod	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** The method for applying tiered pricing. Possible values are: • `Range`—All items receive the discount of the highest tier the quantity falls in. • `Slab`—Items receive the discount defined for the tier they fall in. The default value is `Range`. Term-based discounts can't be of type `Slab`. This field is available in API version 51.0 and later.

Field	Details
Description	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Text description of the price adjustment schedule.
IsActive	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the price adjustment schedule is active (`true`) or not (`false`). You can change this field's value as often as necessary. Label is **Active**. Default value is `False`.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates whether the price adjustment schedule has been archived (`true`) or not (`false`). This field is read-only.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, it's possible that this record was referenced (`LastReferencedDate`) and not viewed.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. The name of the price adjustment schedule. This field is read-only. Label is **Price Adjustment Schedule Name**.
OwnerId	**Type** reference

Field	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** The Salesforce ID of the sales rep who owns the price adjustment schedule.

Usage

As you create a PriceAdjustmentSchedule, you associate PriceAdjustmentTiers with it. A PriceAdjustmentSchedule is inactive until at least one PriceAdjustmentTier is added to it. A PriceAdjustmentSchedule comprises all related PriceAdjustmentTiers, with a limit of 25.

To use PriceAdjustmentSchedule, associate it with a PriceBookEntry.

- A PriceBookEntry can be associated with up to five PriceAdjustmentSchedules, but only one PriceAdjustmentSchedule can be associated with a PriceBookEntry.
- When you activate or deactivate a PriceAdjustmentSchedule, its PriceBookEntry association is also activated or deactivated.
- An adjustment to a PriceBookEntry is applied only if the associated PriceAdjustmentSchedule is active.
- After a PriceAdjustmentSchedule is associated with a PriceBookEntry, if multicurrency is enabled, the currencyIsoCode field can't be modified.
- When you associate a PriceAdjustmentSchedule with a PricebookEntry, a junction object PricebookEntryAdjustment is created.

The PriceAdjustmentTier object and the `ScheduleType` and `AdjustmentMethod` fields can be modified only when a PriceAdjustmentSchedule is inactive.

SEE ALSO:

PriceAdjustmentTier

PricebookEntryAdjustment

PriceAdjustmentTier

Represents a discount tier in a price adjustment schedule. This object is available in API version 47.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is available only if the B2B Commerce license is enabled.

Fields

Field	Details
LowerBound	**Type** double **Properties** Create, Filter, Sort, Update **Description** The minimum quantity the discount can be applied to. It must be a positive integer and less than or equal to the upper bound of the tier.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** For internal use only.
PriceAdjustmentScheduleId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the price adjustment schedule that the discount is applied to.
TierType	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The unit of the discount. Possible values are: • AdjustmentAmount—An amount discounted from an item's list price • AdjustmentPercentage—A percentage discounted from an item's list price
TierValue	**Type** double **Properties** Create, Filter, Sort, Update **Description** The value of the discount.

Field	Details
UpperBound	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The maximum quantity the discount can be applied to. Must be a positive integer. Not inclusive. Set this value one digit higher than the quantity you want the tier to include. For example, if a tier's upper bound is 99, set the value of `UpperBound` to 100. For the last tier, the value is optional.

Usage

To use PriceAdjustmentTiers, associate them with a PriceAdjustmentSchedule.

Tiers can't overlap, and no gaps are allowed between tiers.

SEE ALSO:

PriceAdjustmentSchedule

Pricebook2

Represents a price book that contains the list of products that your org sells.

Note: Price books are represented by Pricebook2 objects. As of API version 8.0, the Pricebook object is no longer available. Requests containing Pricebook are refused, and responses don't contain the Pricebook object.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
Description	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Text description of the price book.

Field	Details
IsActive	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the price book is active (`true`) or not (`false`). Inactive price books are hidden in many areas in the user interface. You can change this field's value as often as necessary. Label is **Active**.
IsArchived	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the price book has been archived (true) or not (false). This field is read only.
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the price book has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
IsStandard	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the price book is the standard price book for the org (`true`) or not (`false`). Every org has one standard price book—all other price books are custom price books.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.

Field	Details
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, it's possible that this record was referenced (`LastReferencedDate`) and not viewed.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. Name of this object. This field is read-only for the standard price book. Label is **Price Book Name**.
`ValidFrom`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date and time when a Commerce price book is initially valid. If this field is `null`, the price book is valid immediately when active. Available in API version 48.0 and later.
`ValidTo`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date and time when a Commerce price book is valid to. If this field is `null`, the price book is valid until it's deactivated. Available in API version 48.0 and later.

Usage

A price book is a list of products that your org sells.

- Each org has one standard price book that defines the standard or generic list price for each product or service that it sells.
- An org can have multiple custom price books to use for specialized purposes, such as for discounts, different channels or markets, or select accounts or opportunities. While your client application can create, delete, and update custom price books, your client application can only update the standard price book.
- For some orgs, the standard price book is the only price needed. If you set up other price books, you can reference the standard price book when setting up list prices in custom price books.

Use this object to query standard and custom price books that have been configured for your org. A common use of this object is to allow your client application to obtain valid Pricebook2 object IDs for use when configuring PricebookEntry records via the API.

Your client application can perform the following tasks on PricebookEntry objects:

- Query
- Create for the standard price book or custom price books.
- Update
- Delete
- Change the `IsActive` field when creating or updating records

PriceBook2, Product2, and PricebookEntry Relationships

In the API:

- Price books are represented by Pricebook2 records (as of version 8.0, the Pricebook object is no longer available).
- Products are represented by Product2 records (as of version 8.0, the Product object is no longer available).
- Each price book contains zero or more entries (represented by PricebookEntry records) that specify the products that are associated with the price book. A price book entry defines the price for which you sell a product at a particular currency.

These objects are defined only for those orgs that have products enabled as a feature. If the org doesn't have the products feature enabled, the Pricebook2 object doesn't appear in the `describeGlobal()` call, and you can't access it via the API.

If you delete a Pricebook2 while a line item references PricebookEntry in the price book, the line item is unaffected, but the Pricebook2 is archived and unavailable from the API.

For a visual diagram of the relationships between Pricebook2 and other objects, see Product and Schedule Objects.

Price Book Setup

The process of setting up a price book via the API usually means:

1. Load product data into Product2 records (creating one Product2 record for each product that you want to add).
2. For each Product2 record, create a PricebookEntry that links the Product2 record to the standard Pricebook2. Define a standard price for a product at a given currency (if you have multicurrency enabled) before defining a price for that product in the same currency in a custom price book.
3. Create a Pricebook2 record to represent a custom price book.
4. For each Pricebook2 record, creating a PricebookEntry for every Product2 that you want to add, specifying unique properties for each PricebookEntry (such as the `UnitPrice` and `CurrencyIsoCode`) as needed.

Code Sample—Java

```
public void pricebookSample() {
  try {
    //Create a custom pricebook
    Pricebook2 pb = new Pricebook2();
    pb.setName("Custom Pricebok");
    pb.setIsActive(true);
    SaveResult[] saveResults = connection.create(new SObject[]{pb});
    pb.setId(saveResults[0].getId());
```

```
    // Create a new product
    Product2 product = new Product2();
    product.setIsActive(true);
    product.setName("Product");
    saveResults = connection.create(new SObject[]{product});
    product.setId(saveResults[0].getId());

    // Add product to standard pricebook
    QueryResult result = connection.query(
        "select Id from Pricebook2 where isStandard=true"
    );
    SObject[] records = result.getRecords();
    String stdPbId = records[0].getId();

    // Create a pricebook entry for standard pricebook
    PricebookEntry pbe = new PricebookEntry();
    pbe.setPricebook2Id(stdPbId);
    pbe.setProduct2Id(product.getId());
    pbe.setIsActive(true);
    pbe.setUnitPrice(100.0);
    saveResults = connection.create(new SObject[]{pbe});

    // Create a pricebook entry for custom pricebook
    pbe = new PricebookEntry();
    pbe.setPricebook2Id(pb.getId());
    pbe.setProduct2Id(product.getId());
    pbe.setIsActive(true);
    pbe.setUnitPrice(100.0);
    saveResults = connection.create(new SObject[]{pbe});
  } catch (ConnectionException ce) {
    ce.printStackTrace();
  }
}
```

Associated Objects

This object has the following associated objects. Unless noted, they're available in the same API version as this object.

Pricebook2History
History is available for tracked fields of the object.

SEE ALSO:

Product and Schedule Objects

Pricebook2History

Represents historical information about changes that have been made to the standard fields of the associated Pricebook2, or to any custom fields with history tracking enabled. This object is available in API version 51.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Special Access Rules

This object is always read-only.

Fields

Field	Details
`Pricebook2Id`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the Pricebook2 associated with this record.
`DataType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Data type of the field that was changed.
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Name of the price book field that was modified, or a special value to indicate some other modification to the price book.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). This is a standard system field. Label is **Deleted**.

Field	Details
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** New value of the modified price book field. Maximum of 255 characters.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** Previous value of the modified price book field. Maximum of 255 characters.

Usage

Price book history entries are indirectly created each time a price book is modified.

Two rows are added to this record when foreign key fields change. One row contains the foreign key object names that display in the online application. For example, `Jane Doe` is recorded as the name of a Contact. The other row contains the actual foreign key ID that is only returned to and visible from the API.

This object respects field level security on the parent object.

SEE ALSO:

Pricebook2

PricebookEntry

Represents a product entry (an association between a Pricebook2 and Product2) in a price book.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`ActivePriceAdjustmentQuantity`	**Type** int

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** The count of active price adjustment schedules associated with the price book entry. This field is available in API version 49.0 and later.
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this price book entry is active (`true`) or not (`false`). Although you can never delete PricebookEntry records, your client application can set this flag to `false`. Inactive PricebookEntry records are hidden in many areas in the user interface. You can change this flag on a PricebookEntry record as often as necessary.
`IsArchived`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the PricebookEntry has been archived (true) or not (false). This is set to `true` when the Product2 record it's associated with is archived, or when the Pricebook2 record is archived. This field is read only. Available in API version 45.0 and later. Label is **Archived**.
`Name`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of this PricebookEntry record. This read-only field references the value in the Name field of the Product2 record. Label is **Product Name**.

Field	Details
`Pricebook2Id`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the Pricebook2 record with which this record is associated. This field must be specified when creating Pricebook2 records. It can't be changed in an update.
`Product2Id`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the Product2 record with which this record is associated. This field must be specified when creating Product2 records. It can't be changed in an update.
`ProductCode`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Product code for this record. This read-only field references the value in the **ProductCode** field of the associated Product2 record.
`UnitPrice`	**Type** currency **Properties** Create, Filter, Sort, Update **Description** Required. Unit price for this price book entry. You can specify a value only if `UseStandardPrice` is set to `false`. Label is **List Price**.
`UseStandardPrice`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this price book entry uses the standard price defined in the standard Pricebook2 record (`true`) or not (`false`). If set to `true`, then the `UnitPrice` field is read-only, and the value will be the same as the `UnitPrice` value in the corresponding PricebookEntry in the standard price book (that is, the PricebookEntry record whose `Pricebook2Id` refers to the standard price book and whose `Product2Id` and

Field	Details
	`CurrencyIsoCode` are the same as this record). For PricebookEntry records associated with the standard Pricebook2 record, this field must be set to `true`.

Usage

Use this object to define the association between your organization's products (Product2) and your organization's standard price book or to other, custom-defined price books (Pricebook2). Create one PricebookEntry record for each standard or custom price and currency combination for a product in a Pricebook2.

When creating these records, you must specify the IDs of the associated Pricebook2 record and Product2 record. Once created, your client application can't update these IDs.

This object is defined only for those organizations that have products enabled as a feature. If the organization does not have the products feature enabled, then the PricebookEntry object does not appear in the `describeGlobal()` call, and you can't access it.

If you delete a PriceBookEntry while a line item references it, the line item is unaffected, but the PriceBookEntry will be archived and unavailable from the API. Deleted PriceBookEntry records can't be recovered.

You must load the standard price for a product before you are permitted to load its custom price(s).

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

PricebookEntryHistory
History is available for tracked fields of the object.

SEE ALSO:

Object Basics

PricebookEntryAdjustment

Read-only junction object created when you associate a price adjustment schedule with a price book entry. This object is available in API version 47.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is available only if the B2B Commerce license is enabled.

Fields

Field	Details
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** For internal use only.
`PriceAdjustmentScheduleId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the price book entry adjustment.
`PricebookEntryId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the price book entry that this price book entry adjustment is associated with.

SEE ALSO:

PriceAdjustmentSchedule

ProcessDefinition

Represents the definition of a single approval process.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`, `search()`

Portal and communities users with the Customer Community Plus and Partner Community licenses can access this object. All users in org with approvals enabled have read access to ProcessDefinition.

Fields

Field	Details
`Description`	**Type** textarea **Properties** Filter, Nillable, Sort **Description** A description of this process, with a maximum of 3,000 characters.
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The external name of the process; the name seen by users.
`LockType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of lock applied to the record being approved. When a record is in the approval process, it's always locked, and only an administrator can edit it. However, the currently assigned approver can also be allowed to edit the record. • Total • Admin • Owner • Workitem • Node • none
`Name`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The unique process name, used internally.
`State`	**Type** picklist

Field	Details
	Properties Filter, Group, Restricted picklist, Sort **Description** The current state of this process. • Active • Inactive • Obsolete
`TableEnumOrId`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Specifies the object associated with the approval process, such as Account or Contact.
`Type`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The type of this process. • Approval Process—Used to control the action taken for a record. • State-based Process—Used internally to track various control processes, such as for developing Salesforce Knowledge articles.

Usage

Use this object to read the description of an approval process. The definition is read-only.

ProcessException

Represents a processing failure on an order summary. A separate process is required to resolve the failure that caused the process exception before order summary processing can continue. This object is available in API version 50.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
AttachedToId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the object associated with the ProcessException.
CaseId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the case associated with the ProcessException.
Category	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** ProcessingException type. You can customize the category picklist to represent your business processes. Possible values are: • Fulfillment • Invoicing • Order Activation • Order Approval • Payment
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** Detailed description of the ProcessException.
ExternalReference	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description Description of external entities associated with the ProcessException.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Timestamp for when the current user last viewed this record. A null value can mean that this record has only been referenced (LastReferencedDate) and not viewed.
Message	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Short description of the ProcessException
OrderSummaryId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the OrderSummary associated with the ProcessException. The ProcessException component is displayed on this OrderSummary.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the User who currently owns this ProcessException. Default value is the User logged in to the API to perform the create.

Field	Details
`Priority`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** Resolution priority for the ProcessException. You can customize the priority picklist to represent your business processes. Possible values are: • `High` • `Low`
`ProcessExceptionNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The unique name of the ProcessException, formatted as PE-(00000000).
`Severity`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** Severity of the ProcessException. Each severity value corresponds to one severity category. You can customize the severity picklist to represent your business processes. If you customize the severity picklist, include at least one severity value for each severity category. Possible values are: • `High` • `Low`
`SeverityCategory`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Severity category of the ProcessException. Each severity category corresponds to one or more severity values. The severity category is used to show the severity icon in the ProcessException list view. Possible values are: • `High` • `Low`

Field	Details
Status	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Status of the ProcessException. Each status corresponds to one status category, shown here in parentheses. You can customize the status picklist to represent your business processes. If you customize the status picklist, include at least one status value for each status category. Possible values are: • `Ignored` (Inactive) • `New` (Active) • `Paused` (Inactive) • `Resolved` (Resolved) • `Triaged` (Active) • `Voided` (Inactive)
StatusCategory	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Status category of the ProcessException. Each status category corresponds to one or more statuses. Possible values are: • `ACTIVE` • `INACTIVE` • `RESOLVED`

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ProcessExceptionOwnerSharingRule
Sharing rules are available for the object.

ProcessExceptionShare
Sharing is available for the object.

ProcessInstance

Represents an instance of a single, end-to-end approval process. Use this and the node, step, and workitem process instance objects to create approval history reports.

Note: Exceptions apply to approval history data retrieved with this object and available only via the SOAP API. For each approval process instance that was pending when Summer '14 became available for your organization, some field values are never populated or are populated only after the approval process instance is next acted upon—such as when a user approves, rejects, or reassigns an approval request—after the Summer '14 rollout.

For approval process instances that were completed before the Summer '14 rollout, all Process Instance fields are automatically populated, with one exception: `CompletedDate` is never populated for approval process instances that were completed before January 1, 2013. For approval process instances that were pending during the Summer '14 rollout, all ProcessInstance fields are automatically populated, with two exceptions: `CompletedDate` and `LastActorId` are populated only after the approval process instance is complete.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`CompletedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The completion date and time of the approval process. The `ElapsedTimeDay`, `ElapsedTimeHours`, and `ElapsedTimeMinutes` field values are calculated using `CompletedDate`.
`ElapsedTimeInDays`	**Type** double **Properties** Filter, Nillable, Sort **Description** The total elapsed time in days between when the approval process instance was started and now.
`ElapsedTimeInHours`	**Type** double **Properties** Filter, Nillable, Sort

Field	Details
	Description The total elapsed time in hours between when the approval process instance was started and now.
`ElapsedTimeInMinutes`	**Type** double **Properties** Filter, Nillable, Sort **Description** The total elapsed time in minutes between when the approval process instance was started and now.
`LastActorId`	**Type** reference **Properties** Group, Filter, Nillable, Sort **Description** The last actor that approved, rejected, or recalled the process.
`ProcessDefinitionId`	**Type** reference **Properties** Group, Filter, Sort **Description** The ID of this approval process instance.
`Status`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The status of this approval process instance, for example Started, Pending, or Approved.
`TargetObjectId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the object affected by this approval process instance.

Usage

Use this object to query or retrieve an approval process.

The following SOQL query returns details for all the ProcessInstanceStep records related to individual ProcessInstance records. The nested query references `Steps`, which is the child `relationshipName` for ProcessInstanceStep in the ProcessInstance object.

```
SELECT Id, (SELECT Id, StepStatus, Comments FROM Steps)
FROM ProcessInstance
```

The following SOQL query returns details for all the ProcessInstanceWorkitem records related to individual ProcessInstance records. The nested query references `Workitems`, which is the child `relationshipName` for ProcessInstanceWorkitem in the ProcessInstance object.

```
SELECT Id, (SELECT Id, ActorId, ProcessInstanceId FROM Workitems)
FROM ProcessInstance
```

ProcessInstanceHistory can help provide a unified read-only view of the ProcessInstanceStep and ProcessInstanceWorkitem objects.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ProcessInstanceHistory
History is available for tracked fields of the object.

SEE ALSO:

ProcessInstanceHistory
ProcessInstanceStep
ProcessInstanceWorkitem

ProcessInstanceHistory

This read-only object shows all steps and pending approval requests associated with an approval process (ProcessInstance).

Supported Calls

`describeSObjects()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Fields

Field	Details
`ActorId`	**Type** reference **Properties** Filter, Group, Sort

Field	Details
	Description ID of the user who is currently assigned to this ProcessInstance.
`Comments`	**Type** string **Properties** Filter, Nillable, Sort **Description** Comments for a ProcessInstanceStep. This field doesn't apply to ProcessInstanceWorkitem records.
`ElapsedTimeInDays`	**Type** double **Properties** Filter, Nillable, Sort **Description** The total time in days between when the approval process instance was started and when it was completed.
`ElapsedTimeInHours`	**Type** double **Properties** Filter, Nillable, Sort **Description** The total time in hours between when the approval process instance was started and when it was completed.
`ElapsedTimeInMinutes`	**Type** double **Properties** Filter, Nillable, Sort **Description** The total time in minutes between when the approval process instance was started and when it was completed.
`IsPending`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the ProcessInstance is pending (`true`) or not (`false`).

Field	Details
`OriginalActorId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user who was originally assigned this ProcessInstance.
`ProcessInstanceId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the ProcessInstance.
`ProcessNodeId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of this step.
`RemindersSent`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Number of reminders that have been sent. Default is 0 (zero).
`StepStatus`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Indicates the current status of the ProcessInstanceStep.
`TargetObjectId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the object being approved.

Usage

This object helps you replicate the related list functionality of the Salesforce user interface for approval processes. Use ProcessInstanceHistory for a unified read-only view of the ProcessInstanceStep and ProcessInstanceWorkitem objects. You can't queryProcessInstanceHistory. Instead, you can query ProcessInstanceHistory by including it in a nested query on the parent ProcessInstance object. For example, the following SOQL query returns all the ProcessInstanceHistory records related to individual ProcessInstance records. The nested query references `StepsAndWorkitems`, which is the child `relationshipName` for ProcessInstanceHistory in the ProcessInstance object.

```
SELECT Id, (SELECT Id, StepStatus, Comments FROM StepsAndWorkitems)
FROM ProcessInstance
```

This object respects field-level security on the parent object.

SEE ALSO:

ProcessInstance

ProcessInstanceStep

ProcessInstanceWorkitem

ProcessInstanceStep

Represents one work item in an approval process (ProcessInstance).

Note: Exceptions apply to approval history data retrieved with this object and available only via the SOAP API. For each approval process instance that was pending when Summer '14 became available for your organization, some field values are never populated or are populated only after the approval process instance is next acted upon—such as when a user approves, rejects, or reassigns an approval request—after the Summer '14 rollout.

ProcessInstanceStep fields are never populated for approval process instances that were completed before the Summer '14 rollout. For approval process instances that were pending during the Summer '14 rollout, all ProcessInstanceStep fields are populated only after the approval process instance is next acted upon after the Summer '14 rollout.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`ActorId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user who is currently assigned to this approval step.

Field	Details
Comments	**Type** string **Properties** Filter, Nillable, Sort **Description** Limit: 4,000 bytes.
ElapsedTimeInDays	**Type** double **Properties** Filter, Nillable, Sort **Description** The total time in days since this step was started.
ElapsedTimeInHours	**Type** double **Properties** Filter, Nillable, Sort **Description** The total time in hours since this step was started.
ElapsedTimeInMinutes	**Type** double **Properties** Filter, Nillable, Sort **Description** The total time in minutes since this step was started.
OriginalActorId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user who was originally assigned to this approval step.
ProcessInstanceId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the ProcessInstance that this approval step belongs to.

Field	Details
StepNodeId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the node currently assigned to this approval step.
StepStatus	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The current status of this approval step. • Approved • Fault • Held • NoResponse • Pending • Reassigned • Rejected • Removed • Started If the approval step requires unanimous approval and one approver rejects the request, the value of this field for the other approvers changes to NoResponse. Likewise, if approval is based on the first response and an approver responds, the value of this field for the other approvers changes to NoResponse.

Usage

Query or retrieve a new step in an approval process (ProcessInstance).

SEE ALSO:

ProcessInstance

ProcessInstanceHistory

ProcessInstanceWorkitem

ProcessInstanceNode

Represents a step in an instance of an approval process. Compare to ProcessNode, which describes the step in a process definition. Use this object to retrieve approval history.

Note: Exceptions apply to approval history data retrieved with this object and available only via the SOAP API. For each approval process instance that was pending when Summer '14 became available for your organization, some field values are never populated or are populated only after the approval process instance is next acted upon—such as when a user approves, rejects, or reassigns an approval request—after the Summer '14 rollout.

ProcessInstanceNode fields are never populated for approval process instances that were completed before the Summer '14 rollout. For approval process instances that were pending during the Summer '14 rollout, all ProcessInstanceNode fields are populated only after the approval process instance is next acted upon after the Summer '14 rollout.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`CompletedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The completion date and time of this step in the approval process. The `ElapsedTimeDay`, `ElapsedTimeHours`, and `ElapsedTimeMinutes` field values are calculated using `CompletedDate`.
`ElapsedTimeInDays`	**Type** double **Properties** Filter, Nillable, Sort **Description** The total time in days since this step was started.
`ElapsedTimeInHours`	**Type** double **Properties** Filter, Nillable, Sort **Description** The total time in hours since this step was started.
`ElapsedTimeInMinutes`	**Type** double **Properties** Filter, Nillable, Sort

Field	Details
	Description The total time in minutes since this step was started.
LastActorId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The last actor that approved or rejected this step.
NodeStatus	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The status of this approval instance, for example Started, Pending, or Approved.
ProcessInstanceId	**Type** reference **Properties** Filter, Group, Sort **Description** The approval process this step is part of.
ProcessNodeId	**Type** reference **Properties** Filter, Group, Sort **Description** The identifier for this step.
ProcessNodeName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of this step.

ProcessInstanceWorkitem

Represents a user's pending approval request.

Note: Exceptions apply to approval history data retrieved with this object and available only via the SOAP API. For each approval process instance that was pending when Summer '14 became available for your organization, some field values are never populated or are populated only after the approval process instance is next acted upon—such as when a user approves, rejects, or reassigns an approval request—after the Summer '14 rollout.

ProcessInstanceWorkitem fields are never populated for approval process instances that were completed before the Summer '14 rollout. For approval process instances that were pending during the Summer '14 rollout, all ProcessInstanceWorkitem fields are populated after the approval process instance is next acted upon after the Summer '14 rollout, with three exceptions: `ElapsedTimeInDays`, `ElapsedTimeInHours`, and `ElapsedTimeInMinutes` fields are never populated in ProcessInstanceWorkitem records for which equivalent ProcessInstanceStep records were created before the Summer '14 rollout.

For all other ProcessInstanceWorkitem records, these three fields are populated after the approval process instance is next acted upon after the Summer '14 rollout.

Note: Because ProcessInstanceHistory combines fields from ProcessInstanceStep and ProcessInstanceWorkitem, you may notice incorrect elapsed times of 0 in ProcessInstanceHistory records because the elapsed time fields were never populated in the related ProcessInstanceWorkitem record.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`

Fields

Field	Details
`ActorId`	**Type** reference **Properties** Filter, Group, Sort, Update **Description** ID of the user who is currently responsible for approving an approval request.
`ElapsedTimeInDays`	**Type** double **Properties** Filter, Nillable, Sort **Description** The total time in days since this approval request was started.
`ElapsedTimeInHours`	**Type** double

Field	Details
	Properties Filter, Nillable, Sort **Description** The total time in hours since this approval request was started.
`ElapsedTimeInMinutes`	**Type** double **Properties** Filter, Nillable, Sort **Description** The total time in minutes since this approval request was started.
`OriginalActorId`	**Type** reference **Properties** Filter, Group, Sort, Update **Description** ID of the user who was originally assigned this approval request.
`ProcessInstanceId`	**Type** reference **Properties** Filter, Group, Sort, Update **Description** ID of the ProcessInstance associated with this approval request.

Usage

Use this object to manage a pending approval request for a user.

SEE ALSO:

ProcessInstance

ProcessInstanceHistory

ProcessInstanceStep

ProcessNode

Describes a step in a process definition. Compare to ProcessInstanceNode, which describes the step in a running process.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`Description`	**Type** textarea **Properties** Filter, Nillable, Sort **Description** A description of this node, no longer than 3,000 bytes.
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The external name of the node; the name seen by users.
`Name`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The unique node name.
`ProcessDefinition`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the object affected by this approval instance.

Usage

Use this object to get the description of a process definition.

The following SOQL query returns details for all the ProcessInstanceStep records related to individual ProcessInstance records. The nested query references `Steps`, which is the child `relationshipName` for ProcessInstanceStep in the ProcessInstance object.

```
SELECT Id, (SELECT Id, StepStatus, Comments FROM Steps)
FROM ProcessInstance
```

The following SOQL query returns details for all the ProcessInstanceWorkitem records related to individual ProcessInstance records. The nested query references `Workitems`, which is the child `relationshipName` for ProcessInstanceWorkitem in the ProcessInstance object.

```
SELECT Id, (SELECT Id, ActorId, ProcessInstanceId FROM Workitems)
FROM ProcessInstance
```

ProcessInstanceHistory can help provide a unified read-only view of the ProcessInstanceStep and ProcessInstanceWorkitem objects.

Product2

Represents a product that your org sells.

This object has several fields that are used only for quantity and revenue schedules (for example, annuities). Schedules are available only for orgs that have enabled the products and schedules features. If these features aren't enabled, the schedule fields don't appear in the DescribeSObjectResult, and you can't query, create, or update the fields.

Note: Product2 objects represent products. As of API version 8.0, the Product object is no longer available. Requests that contain Product are refused, and responses don't contain the Product object.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`CanUseQuantitySchedule`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the product can have a quantity schedule (`true`) or not (`false`). Label is **Quantity Scheduling Enabled**.
`CanUseRevenueSchedule`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the product can have a revenue schedule (`true`) or not (`false`). Label is **Revenue Scheduling Enabled**.
`ConnectionReceivedId`	**Type** reference

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** ID of the PartnerNetworkConnection that shared this record with your organization. This field is available if you enabled Salesforce to Salesforce.
ConnectionSentId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the PartnerNetworkConnection that you shared this record with. This field is available if you enabled Salesforce to Salesforce. This field is supported using API versions earlier than 15.0. In all other API versions, this field's value is null. You can use the new PartnerNetworkRecordConnection object to forward records to connections.
CurrencyIsoCode	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Available only for orgs with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the org.
Description	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A text description of this record. Label is **Product Description**.
DisplayUrl	**Type** url **Properties** Create, Filter, Nillable, Sort, Update **Description** URL leading to a specific version of a record in the linked external data source.
ExternalDataSourceId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description ID of the related external data source.
`ExternalId`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The unique identifier of a record in the linked external data source. For example, *`ID #123`*.
`Family`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Name of the product family associated with this record. Product families are configured as picklists in the user interface. To obtain a list of valid values, call `describeSObjects()` and process the DescribeSObjectResult for the values associated with the `Family` field. Label is **Product Family**.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this record is active (`true`) or not (`false`). Inactive Product2 records are hidden in many areas in the user interface. You can change the `IsActive` flag on a Product2 object as often as necessary. Label is **Active**.
`IsArchived`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Describes whether the product is archived. The default value is `false`.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter

Field	Details
	Description Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (`LastReferencedDate`) but not viewed it.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. Default name of this record. Label is **Product Name**.
`NumberOfQuantityInstallments`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** If the product has a quantity schedule, the number of installments.
`NumberOfRevenueInstallments`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** If the product has a revenue schedule, the number of installments.

Field	Details
ProductClass	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** This field is read-only. Its value is determined by the value of the `Type` field and whether the product is associated with a `ProductAttribute` record. It describes whether a product is a simple product, a variation parent, or a product variation. Possible values are: • `Simple`—This product has no variations • `VariationParent`—This product is a variation parent. It's the base product for one or more product variations and, though it has its own stock-keeping unit (SKU), isn't a sellable entity. Instead, it's the parent of sellable entities—its variations. • `Variation`—This product is a variation of a parent product. Each variation has its own SKU. When the value of `ProductClass = VariationParent`, it never changes. The value of `ProductClass` changes between `Simple` and `Variation` when you attach or detach a `ProductAttribute` record to the product. The default value is `Simple`. This field is available in API version 50.0 and later. It was introduced in support of commerce implementations.
ProductCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Default product code for this record. Your org defines the product code naming pattern.
QuantityInstallmentPeriod	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** If the product has a quantity schedule, the amount of time covered by the schedule.
QuantityScheduleType	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The type of the quantity schedule, if the product has one.

Field	Details
QuantityUnitOfMeasure	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Unit of the product; for example, kilograms, liters, or cases. This field comes with only one value, Each, so consider creating your own. The `QuantityUnitOfMeasure` field on ProductItem inherits this field's values.
RecalculateTotalPrice	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Changes behavior of OpportunityLineItem calculations when a line item has child schedule rows for the `Quantity` value. When enabled, if the rollup quantity changes, then the quantity rollup value is multiplied against the sales price to change the total price.
RevenueInstallmentPeriod	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** If the product has a revenue schedule, the time period covered by the schedule.
RevenueScheduleType	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The type of the revenue schedule, if the product has one.
StockKeepingUnit	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The SKU for the product. Use in tandem with or instead of the `ProductCode` field. For example, you can track the manufacturer's identifying code in the Product Code field and assign the product a SKU when you resell it.

Field	Details
`Type`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of product. The value of Type affects the read-only value of the `ProductClass` field. Possible values are `Base` and `Null`. • When `Type` = `Base`, then `ProductClass` = `VariantionParent`. • When `Type` = `Null`, then `ProductClass` = `Simple`. • If you attach a `ProductAttribute` record to a product, then the product's `ProductClass` value changes to `Variation`. Conversely, when you detach all `ProductAttribute` records from a product, the `ProductClass` value changes to `Simple`. This field is available in API version 50.0 and later. It was introduced in support of commerce implementations.

Schedule Enabled Flags

When enabling the schedules feature, orgs can decide whether to enable quantity schedules, revenue schedules, or both. In addition, you can use the API to control quantity and revenue scheduling at the product level via the `CanUseQuantitySchedule` and `CanUseRevenueSchedule` flags. A value of `true` for either flag indicates that the product and any OpportunityLineItems can have a schedule of that type. These flags can be set when creating or updating Product2 records.

Default Schedule Fields

The remaining schedule fields for this object define default schedules. Default schedule values are used to create an OpportunityLineItemSchedule when an OpportunityLineItem is created for the Product.

The default schedule fields support the following valid values (all fields are also nillable).

Field	Valid Values
`RevenueScheduleType`	Divide, Repeat
`RevenueInstallmentPeriod`	Daily, Weekly, Monthly, Quarterly, Yearly
`NumberOfRevenueInstallments`	Integer between 1 and 150, inclusive.
`QuantityScheduleType`	Divide, Repeat
`QuantityInstallmentPeriod`	Daily, Weekly, Monthly, Quarterly, Yearly
`NumberOfQuantityInstallments`	Integer between 1 and 150, inclusive

When you attempt to set the schedule fields when creating or updating, the API applies cross-field integrity checks. The integrity requirements are:

- If the schedule type is nil, the installment period and number of installments must be nil.
- If the schedule type is set to any value, then the installment period and number of installments must be non-nil.

Any create or update that fails these integrity checks is rejected with an error.

These default schedule fields, `CanUseQuantitySchedule`, and `CanUseRevenueSchedule`, are restricted picklist fields and are available only if the org has the schedules feature enabled.

Usage

Use this object to define the default product information for your org. This object is associated by reference with Pricebook2 objects via PricebookEntry objects. The same product can be represented in different price books as price book entries. In fact, the same product can be represented multiple times (as separate PricebookEntry records) in the same price book with different prices or currencies. A product can only have one price for a given currency within the same price book. To be used in custom price books, all standard prices must be added as price book entries to the standard price book.

You can query the products that have been configured for your org. For example, you can allow your client application to obtain valid product IDs for use when configuring PricebookEntry records via the API. Your client application can perform the following tasks on PricebookEntry objects:

- Query
- Create for the standard price book or custom price books.
- Update
- Delete
- Change the `IsActive` field when creating or updating records

This object is defined only for those orgs that have products enabled as a feature. If the org doesn’t have the products feature, this object doesn’t appear in the `describeGlobal()` call, and you can't describe or query this object.

If you try to delete a product via the API but there's an opportunity that uses that product, the delete fails. The workaround is to delete the product in the user interface, which gives you an option to archive the product.

Note: On opportunities and opportunity products, the workflow rules, validation rules, and Apex triggers fire when an update to a child opportunity product or schedule causes an update to the parent record. This means your custom application logic is enforced when there are updates to the parent record, ensuring higher data quality and compliance with your organization’s business policies.

Associated Objects

This object has the following associated objects. Unless it’s noted, they’re available in the same API version as this object.

Product2Feed (API version 18.0)
Feed tracking is available for the object.

Product2History
History is available for tracked fields of the object.

SEE ALSO:

Object Basics

ProductAttribute

Represents the attributes that can be associated with a product. This object is available in API version 50.0 and later.

Supported Calls

`create`, `delete`, `describeLayout()`, `describeSObjects()`, `getDeleted`, `getUpdated`, `query()`, `retrieve()`, `undelete`, `update`, `upsert`

Special Access Rules

You must have the B2B Commerce license and a CMS workspace to access products.

Fields

Field	Details
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The default value is `USD`. Possible values are: • `USD`—U.S. Dollar
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** Name of the product attribute set.
`ProductId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the product that the attribute is associated with. This field is unique within your organization.
`Sequence`	**Type** int

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The order that product attributes appear in.
VariantParentId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the variation parent record associated with the product attribute.

ProductAttributeSet

Represents a group of attributes that can be associated with a product. This object is available in API version 50.0 and later.

Supported Calls

`create`, `delete`, `describeSObjects()`, `query()`, `retrieve()`, `update`, `upsert`

Special Access Rules

You must have the B2B Commerce license and a CMS workspace to access products.

Fields

Field	Details
Description	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Text description of the product attribute set.
DeveloperName	**Type** string **Properties** Create, Filter, Group, Sort, Update

Field	Details
	Description The unique name of the object in the API.
Language	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Possible values are: • da—Danish • de—German • en_US—English • esSpanish • es_MX—Spanish (Mexico) • fi—Finnish • fr—French • it—Italian • ja—Japanese • ko—Korean • nl_NL—Dutch • no—Norwegian • pt_BR—Portuguese (Brazil) • ru—Russian • sv—Swedish • th—Thai • zh_CN—Chinese (Simplified) • zh_TW—Chinese (Traditional)
MasterLabel	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the product attribute set.

ProductAttributeSetItem

Represents a set of attributes that can be associated with a product. This object is available in API version 50.0 and later.

Supported Calls

`create`, `delete`, `describeSObjects()`, `query()`, `retrieve()`, `update`, `upsert`

Special Access Rules

You must have the B2B Commerce license and a CMS workspace to access products.

Fields

Field	Details
`Field`	**Type** reference **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The field's API name.
`ProductAttributeSetId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the product attribute set.
`Sequence`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The order that product attributes appear in.

ProductAttributeSetProduct

Represents the product associated with a set of attributes. This object is available in API version 50.0 and later.

Supported Calls

`create`, `delete`, `describeLayout()`, `describeSObjects()`, `getDeleted`, `getUpdated`, `query()`, `retrieve()`, `undelete`, `update`, `upsert`

Special Access Rules

You must have the B2B Commerce license and a CMS workspace to access products.

Fields

Field	Details
CurrencyIsoCode	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** The default value is `USD`. Possible values are: • `USD`—U.S. Dollar
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name of the product associated with the product attribute set.
ProductAttributeSetId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the product attribute set.
ProductId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the product associated with the product attribute set.

Product2DataTranslation

Represents the translated values of the data stored within a Product2 record's fields. This object is available in API version 45.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

- Your organization must be using Enterprise, Performance, Unlimited, or Developer edition.
- Translation Workbench and data translation must be enabled in your org.
- To view this object, you must have the "View Setup and Configuration" permission

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** The translated value for the Product2 description.
`IsOutOfDate`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the translation is out-of-date (`true`) or current (`false`). A translation is out-of-date if the parent Product2 record is updated after the last translation was filed.
`Language`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The language for these translated values.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The translated value for the Product2 record name. This field is required to translate the text in other fields.

Field	Details
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The record ID of the Product2 associated with the data that is being translated.

Usage

Use this object to translate the data stored in a Product2 record into the different languages supported by Salesforce. If data translation is enabled for custom fields on the Product2 object, additional Product2DataTranslation fields exist for translating the data contained within those fields.

ProductCategory

Represents the category that products are organized in.This object is available in API version 49.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

You must have the B2B Commerce license and a CMS workspace to access product media.

Fields

Field	Details
`CatalogId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the catalog.
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update

Field	Details
	Description The default value is `USD`.
`Description`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The description of the category.
`IsNavigational`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The default value is `false`.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Name of the category.
`NumberOfProducts`	**Type** int

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** The number of products in a category.
`ProductCategoryId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the category.
`SortOrder`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Order that the category is displayed in.

ProductCategoryDataTranslation

Represents the translated values for the data stored within a ProductCategory record's fields. This object is available in API version 46.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

- Your organization must be using Enterprise, Performance, Unlimited, or Developer edition.
- Translation Workbench and data translation must be enabled in your org.
- To view this object, you must have the "View Setup and Configuration" permission

Fields

Field	Details
`Description`	**Type** textarea

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The translated value for the Product Category description.
IsOutOfDate	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the translation is out-of-date (`true`) or current (`false`). A translation is out-of-date if the parent ProductCategory record is updated after the last translation was filed.
Language	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The language for these translated values.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description**
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description**

Usage

Use this object to translate the data stored in a Product Category record into the different languages supported by Salesforce. If data translation is enabled for custom fields on the ProductCategory object, additional ProductCategoryDataTranslation fields exist for translating the data contained within those fields.

ProductConsumed

Represents an item from your inventory that was used to complete a work order or work order line item in field service.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Note: To create or delete products consumed, you need Create permission on product items.

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** Notes and context about the product consumed.
`Discount`	**Type** percent **Properties** Create, Filter, Nillable, Sort, Update **Description** The discount provided.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the product consumed was last modified. Its label in the user interface is Last Modified Date.
`LastViewedDate`	**Type** dateTime

Field Name	Details
	Properties Filter, Nillable, Sort **Description** The date when the product consumed was last viewed.
ListPrice	**Type** currency **Properties** Filter, Nillable, Sort **Description** The list price of the product.
PricebookEntryId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Price book associated with the product consumed. If the work order and the product item's associated product are related to the same price book, the Price Book Entry auto-populates based on the product item.
Product2Id	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Product associated with the product consumed.
ProductConsumedNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** (Read Only) Auto-generated number identifying the product consumed.
ProductItemId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort

Field Name	Details
	Description Product item associated with the product consumed. Creating a product consumed record subtracts the quantity consumed from the linked product item's quantity.
ProductName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name for the product consumed.
QuantityConsumed	**Type** double **Properties** Create, Filter, Sort, Update **Description** The quantity of products consumed.
QuantityUnitOfMeasure	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** Units of the consumed item; for example, kilograms or liters. Quantity Unit of Measure picklist values are inherited from the Quantity Unit of Measure field on products.
Subtotal	**Type** currency **Properties** Filter, Nillable, Sort **Description** The total price of the product items before discount.
TotalPrice	**Type** currency **Properties** Filter, Nillable, Sort **Description** The total price paid for the product items.

Field Name	Details
UnitPrice	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** The price per unit of the product consumed.
WorkOrderId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Work order that the product was consumed for.
WorkOrderLineItemId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Work order line item that the product was consumed for.

Usage

When a product is consumed during the completion of a work order, create a product consumed record to track its consumption. You can add products consumed to work orders or work order line items. Track product consumption at the line item level if you want to know which products were used for each line item's tasks.

The way you use products consumed depends on how closely you want to track the state of your inventory in Salesforce. If you want to track the entire lifecycle of items in your inventory, including their storage, transfer, and consumption, link your products consumed records to product items. This approach ensures that your inventory numbers auto-update to reflect the consumption of products from your inventory. If you want to track product consumption only, however, specify a Price Book Entry on each product consumed record and leave the Product Item field blank.

Associated Objects

This object has the following associated objects. They're available in the same API version as this object.

ProductConsumedFeed
Feed tracking is available for the object.

ProductConsumedHistory
History is available for tracked fields of the object.

ProductEntitlementTemplate

Represents predefined terms of customer support (Entitlement) that users can add to products (Product2).

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

As of Summer '20 and later, only Salesforce admins, users with access to the Case, Entitlement, or Work Order objects, and users with the View Setup and Configuration permission can access this object.

Fields

Field	Details
`EntitlementTemplateId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the entitlement template. Must be a valid ID.
`Product2Id`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the Product2 associated with the entitlement template. Must be a valid ID.

Usage

Use to query and manage entitlement templates.

SEE ALSO:

Entitlement

ProductItem

Represents the stock of a particular product at a particular location in field service, such as all bolts stored in your main warehouse.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the product item was last modified. Its label in the user interface is Last Modified Date.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the product item was last viewed.
`LocationId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Location associated with the product item. This usually indicates where the product item is stored.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The product item’s owner.

Field Name	Details
Product2Id	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Product associated with the product item, which represents the type of product in your inventory.
ProductItemNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** (Read Only) Auto-generated number identifying the product item.
ProductName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A name for the product item. Try to select a name that indicates what is being stored where; for example, Batteries in Warehouse A.
QuantityOnHand	**Type** double **Properties** Create, Filter, Sort, Update **Description** The quantity at the location. If you want to add a serial number, this value must be 1.
QuantityUnitOfMeasure	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Units of the product item; for example, kilograms or liters. Quantity Unit of Measure picklist values are inherited from the Quantity Unit of Measure field on products.
SerialNumber	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** A unique number for identification purposes. If you want to enter a serial number, the Quantity on Hand must be 1.

Usage

Each product item is associated with a product and a location in Salesforce. If a product is stored at multiple locations, the product will be tracked in a different product item for each location.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ProductItemFeed
Feed tracking is available for the object.

ProductItemHistory
History is available for tracked fields of the object.

ProductItemOwnerSharingRule
Sharing rules are available for the object.

ProductItemShare
Sharing is available for the object.

ProductItemTransaction

Represents an action taken on a product item in field service. Product item transactions are auto-generated records that help you track when a product item is replenished, consumed, or adjusted.

Supported Calls

`create()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** A description of the transaction. The description is blank when the transaction record is created, but can be updated.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (LastReferencedDate) but not viewed it.
ProductItemId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The associated product item.
ProductItemTransactionNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** (Read Only) Auto-generated number identifying the product item transaction.

Field Name	Details
Quantity	**Type** double **Properties** Create, Filter, Sort **Description** The quantity of the product item involved in the transaction. If inventory was consumed, the quantity is negative.
RelatedRecordId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** (Read Only) The product consumed or product transfer related to the action. If the action wasn't related to consumption or transfer, the related record is blank.
TransactionType	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The action that the transaction tracks. • Replenished: When a part is stocked at a location. A Replenished transaction is created when a product item is created. • Consumed: When parts are consumed to complete a work order. A Consumed transaction is created when a record is added to the Products Consumed related list on a work order or work order line item. • Adjusted: When there is a discrepancy or a change in consumption. An Adjusted transaction is created when a product item's Quantity on Hand is edited, a product consumed is updated or delete, or a product transfer is deleted. • Transferred: When parts are transferred between locations.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ProductItemTransactionFeed
Feed tracking is available for the object.

ProductItemTransactionHistory
History is available for tracked fields of the object.

ProductMedia

Represents the rich media, including images and attachments, that can be added to products.This object is available in API version 49.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

You must have the B2B Commerce license and a CMS workspace to access product media.

Fields

Field	Details
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The default value is `USD`. Possible values are: • `USD`—U.S. Dollar
`ElectronicMediaGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Unique ID of the media group.
`ElectronicMediaId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Unique ID of the media record.
`LastReferencedDate`	**Type** dateTime

Field	Details
	Properties Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** Name of the media.
ProductId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the product that the media is associated with.
SortOrder	**Type** int **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The order that product media is displayed in.

ProductRequest

Represents an order for a part or parts in field service.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Authenticated external users can create and update ProductRequest objects.

Fields

Field Name	Details
`AccountId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The account associated with the product request.
`CareProgramEnrolleeId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the care program enrollee associated with the product request. This field is available from API version 49.0 and later.
`CaseId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The case associated with the product request.
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only if the multicurrency feature is enabled. Contains the ISO code for any currency allowed by the organization. The label in the user interface is `Currency ISO Code`.

Field Name	Details
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** A text field for details not recorded in the provided fields.
DestinationLocationId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Where the product is delivered.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the product request was last modified. Its label in the user interface is Last Modified Date.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the product request was last viewed.
NeedByDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Date the product must be delivered by.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field Name	Details
	Description The owner of the shipment.
ProductRequestNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** An auto-assigned number that identifies the shipment.
ShipToAddress	**Type** address **Properties** Filter, Nillable **Description** The address that the product is to be delivered to.
ShipToCity	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The city that the product is to be delivered to.
ShipToCountry	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The country that the product is to be delivered to.
ShipToGeocodeAccuracy	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The accuracy of the geocode for the shipping address.
ShipToLatitude	**Type** double

Field Name	Details
	Properties Create, Filter, Nillable, Sort, Update **Description** The latitude of the location where the product is to be delivered to.
ShipToLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The longitude of the location where the product is to be delivered to.
ShipToPostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The postal code of the address where the product is to be delivered to.
ShipToState	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The name of the state where the product is to be delivered to.
ShipToStreet	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street address where the product is to be delivered to.
ShipmentType	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The type of shipment. The picklist includes the following values by default: • None • Rush

Field Name	Details
	• Overnight • Next Business Day • Pick Up
SourceLocationId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The location the product is shipped from.
Status	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** Status of the product transfer.
WorkOrderId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The work order that the product request is related to.
WorkOrderLineItemId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The work order line item that the product request is related to.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ProductRequestFeed
Feed tracking is available for the object.

ProductRequestHistory
History is available for tracked fields of the object.

ProductRequestOwnerSharingRule
Sharing rules are available for the object.

ProductRequestShare
Sharing is available for the object.

ProductRequestLineItem

Represents a request for a part in field service. Product request line items are components of product requests.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
`AccountId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The account associated with the product request line item.
`CareProgramEnrolleeId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the care program enrollee associated with the product request line item. This field is available from API version 49.0 and later.
`CaseId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The case associated with the product request line item.

Field Name	Details
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** Details not recorded in the provided fields.
DestinationLocationId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Where the product is delivered.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (LastReferencedDate) but not viewed it.
NeedByDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Date the product must be delivered by.
ParentId	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** The product request that the line item belongs to.
Product2Id	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The product associated with the product request line item.
ProductRequestLineItemNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** (Read Only) An auto-assigned number that identifies the product request line item.
QuantityRequested	**Type** double **Properties** Create, Filter, Sort, Update **Description** The amount requested.
QuantityUnitOfMeasure	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Units of the requested product; for example, grams, liters, or units. The picklist values can be customized.
ShipToAddress	**Type** address **Properties** Filter, Nillable **Description** The physical address where the product is needed.

Field Name	Details
ShipToCity	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The city of the address where the product is needed.
ShipToCountry	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The country of the address where the product is needed.
ShipToGeocodeAccuracy	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Accuracy level of the geocode for the address where the product is needed. See Compound Field Considerations and Limitations for details on geolocation compound fields. Note: This field is available in the API only.
ShipToLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with Longitude to specify the precise geolocation of the address where the product is needed. Acceptable values are numbers between –90 and 90 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields. Note: This field is available in the API only.
ShipToLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update

Field Name	Details
	Description Used with Latitude to specify the precise geolocation of the address where the product is needed. Acceptable values are numbers between –180 and 180 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields. Note: This field is available in the API only.
ShipToPostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The postal code of the address where the product is needed.
ShipToState	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The state of the address where the product is needed.
ShipToStreet	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street of the address where the product is needed.
ShipmentType	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The type of shipment. The picklist includes the following values, which can be customized: • Rush • Overnight • Next Business Day • Pick Up

Field Name	Details
SourceLocationId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Where the product is at the time of the request.
Status	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The status of the shipment. The picklist includes the following values, which can be customized: • Draft • Submitted • Received
WorkOrderId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The work order for which the product is needed.
WorkOrderLineItemId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The work order line item for which the product is needed.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ProductRequestLineItemFeed
Feed tracking is available for the object.

ProductRequestLineItemHistory
History is available for tracked fields of the object.

ProductRequired

Represents a product that is needed to complete a work order or work order line item in field service.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the product required was last modified. Its label in the user interface is Last Modified Date.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the product required was last viewed.
ParentRecordId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The work order or work order line item that the product is required for.
ParentRecordType	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description Indicates whether the parent record is a work order or a work order line item.
`Product2Id`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The required product.
`ProductName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the product required.
`ProductRequiredNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** (Read only) Auto-generated number identifying the product required.
`QuantityRequired`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Quantity required of the product.
`QuantityUnitOfMeasure`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Units of the required product; for example, kilograms or liters. Quantity Unit of Measure picklist values are inherited from the Quantity Unit of Measure field on products.

Usage

Required products can be added to work types, work orders, and work order line items to ensure that the assigned service resource arrives with the right equipment.

Adding required products to work types saves you time and keeps your business processes consistent. Work orders and work order line items inherit their work type's required products. For example, if all light bulb replacement jobs require a ladder and a light bulb, add the ladder and light bulb as required products to your Light Bulb Replacement work type. When it's time to create a work order for a customer's light bulb replacement, applying that work type to the work order adds the required products.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ProductRequiredFeed
Feed tracking is available for the object.

ProductRequiredHistory
History is available for tracked fields of the object.

ProductServiceCampaign

Represents a set of activities to be performed on a product service campaign asset, such as a product recall for safety issues or product defects. This object is available in API version 51.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of the product service campaign.
`EndDate`	**Type** date

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The date on which the product service campaign ends.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the asset was last modified. The UI label is Last Modified Date.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the asset was last viewed.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The product service campaign's owner. By default, the product service campaign owner is the user who created the product service campaign record. The UI label is Product Service Campaign Owner.
Priority	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The priority of the product service campaign. Possible values are: • Critical • High • Low • Medium

Field	Details
Product2Id	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the Product2 associated with this campaign. The UI label is Product.
ProductServiceCampaignName	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the product service campaign.
StartDate	**Type** date **Properties** Create, Filter, Group, Sort, Update **Description** The date on which the product service campaign starts.
Status	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The status of the product service campaign. The picklist includes the following values, which can be customized: • `New`—Product service campaign created, but there hasn't yet been any activity. • `In Progress`—Product service campaign has begun. • `On Hold`—Work is paused. • `Completed`—Work is complete. • `Cannot Complete`—Work couldn't be completed. • `Closed`—All work and associated activity is complete. • `Canceled`—Work is canceled, typically before any work began.
StatusCategory	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort

Field	Details
	Description The category that each `Status` value falls into. The `StatusCategory` field has eight default values: seven values that are identical to the default `Status` values, and `None` for statuses without a status category. If you create custom `Status` values, you must indicate which category it belongs to. For example, if you create a *`Waiting for Response`* value, add it the *`On Hold`* category. To learn which processes reference `StatusCategory`, see How are Status Categories Used?
`Type`	**Type** picklist **Properties** Create, Filter, Group, Sort, Update **Description** The type of the product service campaign. The picklist includes the following values, which can be customized: • `Modification`—The asset requires an on-site alteration. • `Recall`—The asset must be returned to the manufacturer for modification or upgrade. • `Service`—The asset needs to be serviced. • `Upgrade`—The asset needs updating.
`WorkTypeId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The work type associated with the product service campaign. A customer uses this field as a guide when setting work type for work orders for the product service campaign. `Duration`, `Duration Type`, and required skills.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ProductServiceCampaignFeed
Feed tracking is available for the object.

ProductServiceCampaignHistory
History is available for tracked fields of the object.

ProductServiceCampaignOwnerSharingRule
Sharing rules are available for the object.

ProductServiceCampaignShare
Sharing is available for the object.

ProductServiceCampaignItem

Represents a product service campaign's asset. This object is available in API version 51.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field	Details
`AssetId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The asset associated with the product service campaign. Must be present if `Product2Id` is not present.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the asset was last modified. Its UI label is Last Modified Date.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the asset was last viewed.
`Product2Id`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description The ID of the Product2 associated with this campaign. The UI label is Product. Must be present if `AssetID` is not present.
ProductServiceCampaignId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. The item's parent product service campaign record.
ProductServiceCampaignItemNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The ID of the product service campaign item.
Status	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The status of the product service campaign item. The picklist includes the following values, which can be customized: • `New`—Product service campaign item created, but there hasn't yet been any activity. • `In Progress`—Product service campaign item has begun. • `On Hold`—Product service campaign item is paused. • `Completed`—Product service campaign item is complete. • `Cannot Complete`—Product service campaign item couldn't be completed. • `Closed`—All product service campaign item and associated activity is complete. • `Canceled`—Product service campaign item is canceled, typically before any work began.
StatusCategory	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort

Field	Details
	Description The category that each `Status` value falls into. The `StatusCategory` field has eight default values: seven values that are identical to the default `Status` values, and `None` for statuses without a status category. If you create custom `Status` values, you must indicate which category it belongs to. For example, if you create a *`Waiting for Response`* value, add it to the *`On Hold`* category. To learn which processes reference `StatusCategory`, see How are Status Categories Used?

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ProductServiceCampaignItemFeed
Feed tracking is available for the object.

ProductServiceCampaignItemHistory
History is available for tracked fields of the object.

ProductServiceCampaignItemOwnerSharingRule
Sharing rules are available for the object.

ProductServiceCampaignItemShare
Sharing is available for the object.

ProductServiceCampaignItemStatus

Represents a status for a product service campaign item in field service. This object is available in API version 51.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Field Service must be enabled.

Fields

Field	Details
`ApiName`	**Type** string **Properties** Filter, Group, idLookup, Sort

Field	Details
	Description The API name of the status value.
IsDefault	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates that the status value is the default status on product service campaign items when `true`. Only one status value can be the default.
MasterLabel	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The label for the picklist value in the UI.
SortOrder	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The value's position in the dropdown list in the UI.
StatusCode	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The status category that the value corresponds to. The Status Category field has seven values that are identical to the default Status values.

Usage

The Status field on product service campaign items comes with the following values:

- New—Product service campaign item created, but there hasn't been any activity.
- In Progress—Work has begun.
- On Hold—Work is paused.
- Completed—Work is complete.
- Cannot Complete—Work couldn't be completed.

- Closed—All work and associated activity is complete.
- Canceled—Work is canceled, typically before any work began.

The ProductServiceCampaignItemStatus object corresponds to the Status field. Adding a value to the Status field—for example, Canceled By Supplier—creates a product service campaign item status record, and vice versa.

Note: Product service campaign items also come with a Status Category field whose values are identical to the default status values. If you create custom status values, you must indicate which category it belongs to. For example, if you create a *`Customer Absent`* value, add it to the *`Cannot Complete`* category. To learn which processes reference StatusCategory, see How are Status Categories Used?

ProductServiceCampaignStatus

Represents a status for a product service campaign in field service. This object is available in API version 51.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Field Service must be enabled.

Fields

Field	Details
`ApiName`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The API name of the status value.
`IsDefault`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates that the status value is the default status on product service campaigns when `true`. Only one status value can be the default.
`MasterLabel`	**Type** string

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** The label for the picklist value in the UI.
SortOrder	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The value's position in the dropdown list in the UI.
StatusCode	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The status category that the value corresponds to. The Status Category field has seven values that are identical to the default Status values.

Usage

The Status field on product service campaigns comes with the following values:

- New—Product service campaign created, but there hasn't been any activity.
- In Progress—Work has begun.
- On Hold—Work is paused.
- Completed—Work is complete.
- Cannot Complete—Work couldn't be completed.
- Closed—All work and associated activity is complete.
- Canceled—Work is canceled, typically before any work began.

The ProductServiceCampaignStatus object corresponds to the Status field. Adding a value to the Status field—for example, Canceled By Supplier—creates a product service campaign status record, and vice versa.

Note: Product service campaigns also come with a Status Category field whose values are identical to the default status values. If you create custom status values, you must indicate which category it belongs to. For example, if you create a `Customer Absent` value, add it to the `Cannot Complete` category. To learn which processes reference StatusCategory, see How are Status Categories Used?

ProductTransfer

Represents the transfer of inventory between locations in field service.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** Details not recorded in the provided fields.
`DestinationLocationId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The place the product is to be delivered.
`ExpectedPickupDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Date the product is expected to be picked up.
`IsReceived`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Checkbox identifying that the product was received.
`LastReferencedDate`	**Type** dateTime

Field Name	Details
	Properties Filter, Nillable, Sort **Description** The date when the product request was last modified. Its label in the user interface is Last Modified Date.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the product request was last viewed.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Owner of the product transfer.
`Product2Id`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Lookup field for the product associated with the product transfer.
`ProductRequestId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Lookup field for the product request associated with the product transfer.
`ProductRequestLineItemId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Lookup field for the product request line item associated with the product transfer.

Field Name	Details
ProductTransferNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** An auto-assigned number that identifies the product transfer.
QuantityReceived	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Amount of product received at the destination location.
QuantitySent	**Type** double **Properties** Create, Filter, Sort, Update **Description** Amount of product sent from the source location.
QuantityUnitOfMeasure	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The units of the product, for example grams, liters, or units.
ReceivedById	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Lookup field for the contact who received the product at the destination location.
ReturnOrderId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The return order associated with the product transfer.

Field Name	Details
ReturnOrderLineItemId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The return order line item associated with the product transfer.
ShipmentExpectedDeliveryDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Lookup field for the shipment related to the product transfer.
ShipmentId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Lookup field for the shipment related to the product transfer.
ShipmentStatus	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** Lookup field for the shipment related to the product transfer.
ShipmentTrackingNumber	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Lookup field for the shipment related to the product transfer.
ShipmentTrackingUrl	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** Lookup field for the shipment related to the product transfer.

Field Name	Details
SourceLocationId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Lookup field for the source location related to the product transfer.
SourceProductItemId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Lookup field for the product item related to the product transfer.
Status	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** Status of the product transfer.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ProductTransferFeed
Feed tracking is available for the object.

ProductTransferHistory
History is available for tracked fields of the object.

ProductTransferOwnerSharingRule
Sharing rules are available for the object.

ProductTransferShare
Sharing is available for the object.

ProductWarrantyTerm

Defines the relationship between a product or product family and warranty term. This object is available in API version 50.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`CoveredProductFamily`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The product family that the warranty term applies to.
`CoveredProductId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the product that the warranty term applies to.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the product warranty term was last modified. Its label in the user interface is `Last Modified Date`.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the product warranty term was last viewed.
`ProductWarrantyTermNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The identifier for this product warranty term.
`WarrantyTermId`	**Type** reference **Properties** Create, Filter, Group, Sort

Field	Details
	Description The ID of the warranty term.

Profile

Represents a profile, which defines a set of permissions to perform different operations. Operations can include querying, adding, updating, or deleting information, and so forth.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`

Special Access Rules

As of Summer '20 and later, Customer Portal and Partner Portal users *can't* access this object.

To view the following settings, assignments, and permissions for standard and custom objects in a specified profile, the View Setup and Configuration permission is required.

- Client settings
- Field permissions
- Layout assignments
- Object permissions
- Permission dependencies
- Permission set tab settings
- Permission set group components
- Record types

As of API version 50.0 and later, only users with correct permissions can view profile names other than their own if the Profile Filtering setting is enabled.

Important: Profile names are also exposed when users with permissions to perform the following tasks take these actions:

- Create a tab or record type with a wizard step that includes the assignment of tabs and record types to profiles.
- Configure a login flow where viewing profile lists is required to make flow associations.
- Set up delegated admins where looking up profiles is needed to identify assignable profiles.
- Administer an org as a delegated customer admin.
- Administer an org as a delegated admin to view and assign profiles of the delegated group.

Fields

Field	Details
Description	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** Description of the profile.
IsSsoEnabled	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort, Update **Description** If `true`, users assigned to this profile can delegate username and password authentication to a corporate database instead of the user database.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this profile. Available in API version 29.0 and later.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this profile. Available in API version 29.0 and later.
Name	**Type** string **Properties** Filter, Group, idLookup, Sort, Update **Description** The name of the profile.
PermissionsShowCompanyNameAsUserBadge	**Type** boolean

Field	Details
	Properties Create, Filter, Update **Description** When on, a user's company name, if available, is displayed in place of the Experience Cloud site role.
`Permissions`*`PermissionName`*	**Type** boolean **Properties** Filter, Update **Description** One field for each permission. If `true`, users assigned to this profile have the named permission. The number of fields varies depending on the permissions for the org and license type. Tip: To get a list of available permissions in SOAP API, use `describeSObjects()`.
`UserLicenseId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the UserLicense associated with this profile.
`UserType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The category of user license. Each `UserType` is associated with one or more UserLicense records. Each UserLicense is associated with one or more profiles. In API version 10.0 and later, valid values include: • Standard: user license. This user type also includes Salesforce Platform and Salesforce Platform One user licenses. Label is **Standard**. • PowerPartner: User whose access is limited because they're a partner and typically access the application through a partner portal or Experience Cloud site. Label is **Partner**. • CSPLitePortal: user whose access is limited because they're an org's customer and access the application through a Customer Portal or Experience Cloud site. Label is **High Volume Portal**. • CustomerSuccess: user whose access is limited because they're an org's customer and access the application through a Customer Portal. Label is **Customer Portal User**.

Field	Details
	• PowerCustomerSuccess: user whose access is limited because they're an org's customer and access the application through a Customer Portal. Label is **Customer Portal Manager**. Users with this license type can view and edit data they directly own or data owned by or shared with users below them in the Customer Portal role hierarchy. • CsnOnly: user whose access to the application is limited to Chatter. This user type includes Chatter Free and Chatter moderator users. Label is **Chatter Free**. • Guest: user whose access is limited because they're an unauthenticated user without login credentials. Label is **Guest**. `UserType` replaces `LicenseType`, which is unavailable as of API version 10.0. In API versions 8.0 and 9.0 `LicenseType` is still available with the following valid values: • AUL: Lightning Platform user license. Label is **Apex Platform**. • AUL1: Lightning Platform user license with only one user. Label is **Apex Platform One**. • Salesforce: Salesforce user license. Label is **Salesforce**. • PackageManager: user who can create and work with managed packages for AppExchange. Label is **Package Manager**. • PRM: user whose access is limited because they're a partner and typically accesses the application through a partner portal. Label is **Partner**. • CustomerUser: user whose access is limited because they're an org's customer and accesses the application through a Customer Portal. Label is **Customer Portal User**. • CustomerManager: user whose access is limited because they're an org's customer and accesses the application through a Customer Portal. Label is **Customer Portal Manager**. Users with this license type can view and edit data they directly own or data owned by or shared with users below them in the Customer Portal role hierarchy.

Usage

Use the Profile object to query the set of currently configured user profiles in your org. Your client application can use Profile objects to obtain valid profile IDs for use when querying or modifying users through the API.

In the user interface, profiles can be used to assign user licenses from specific pools (Lightning Platform user license or Salesforce user license, for example). When users are reassigned to profiles with different license types, the number of available licenses in the old license type pool increases, one per user assignment updated. Also, the number of available licenses decreases by the same amount in the new license type pool.

SEE ALSO:

Object Basics

PermissionSet

ProfileSkill

Represents a profile skill, which describes a user's professional knowledge. This is a global record for the organization, and users are associated through the ProfileSkillUser object.

Note: For information about Live Agent skills, see the Skill topic.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of the profile skill.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp indicating when the current user last viewed a record related to this profile skill. Available in API version 29.0 and later.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp indicating when the current user last viewed this profile skill. Available in API version 29.0 and later.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update

Field Name	Details
	Description The name of the profile skill.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The owner of the profile skill.
UserCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of users with the profile skill.

Usage

Use the ProfileSkill object to look up the attributes of a skill that can be assigned to a user. This is a global object and is not owned by any specific user.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ProfileSkillFeed (API version 34.0)
Feed tracking is available for the object.

ProfileSkillHistory
History is available for tracked fields of the object.

ProfileSkillOwnerSharingRule
Sharing rules are available for the object.

ProfileSkillShare
Sharing is available for the object.

ProfileSkillEndorsement

Represents a detail relationship of ProfileSkillUser. An endorsement of a profile skill shows approval and support of another user's publicly declared skill.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name of the profile skill being endorsed.
`ProfileSkillUserId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the ProfileSkillUser record that is being endorsed.
`UserId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The user ID of the person giving the endorsement.

Usage

Use the ProfileSkillEndorsement object to query about a single endorsement given to a user about a specific skill. Users can't endorse themselves, they can only be endorsed by others unless they are administrators with the "Modify All Data" permission.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ProfileSkillEndorsementFeed (API version 34.0)
Feed tracking is available for the object.

ProfileSkillEndorsementHistory
History is available for tracked fields of the object.

ProfileSkillShare

Represents a sharing entry on a ProfileSkill.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the User or Group has to the ProfileSkill. The possible values are: • `Read` • `Edit` • `All` (This value is not valid for `create()` or `update()` calls.) This value must be set to an access level that is higher than the organization's default access level for ProfileSkill objects.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the parent object, if any.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings.

Field Name	Details
	Values may include: • `Manual`—The User or Group has access because a user with "All" access manually shared the ProfileSkill with them. • `Owner`—The User is the owner of the ProfileSkill or is in a role above the ProfileSkill owner in the role hierarchy.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the User or Group that has been given access to the ProfileSkill.

Usage

This object is read only. It is visible because of constraints to the ProfileSkill object, but it is ignored and does not control which users and groups can view and edit ProfileSkill records owned by other users.

ProfileSkillUser

Represents a detail relationship of User. The object connects profile skills with users.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`EndorsementCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of endorsements.
`Name`	**Type** string

Field Name	Details
	Properties Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name of the skill user.
`ProfileSkillId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the ProfileSkill.
`UserId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the user. This field can't be changed once it is created.

Usage

Use this object to assign specific skills to specific users. ProfileSkillUser appears on the Overview tab on the Chatter profile page. Users can only create a skill mapping for themselves, they can't create skill mappings for others unless they are administrators with the "Modify All Data" permission. Additionally, users can only edit this object if they are the context user and are not editing the `UserId` field.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ProfileSkillUserFeed (API version 34.0)
Feed tracking is available for the object.

ProfileSkillUserHistory
History is available for tracked fields of the object.

Prompt

Represents record details about an in-app guidance prompt or walkthrough. Available in API version 46.0 and later.

Use prompts and walkthroughs to display announcements, training, or news to users within the app. Choose to add an action button or link that links to a URL of your choice. Track views, action button clicks, and walkthrough completes.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Admins have access to add or edit prompts and walkthroughs. For non-admin users, assign the Manage Prompts and Modify Metadata Through Metadata API Functions user permission. Everyone can see the In-App Guidance setup page. To show walkthroughs to users, use the View Walkthroughs user permission, which is part of the Walkthroughs permission set license. The myTrailhead subscription includes this feature. For pricing details, contact your Salesforce account executive. But, you don't have to start the trial or purchase a license to create, preview, or package walkthroughs. Note the restrictions on user visibility of the walkthroughs you create in the Packaging and Prompts and Walkthroughs section.

Packaging Prompts and Walkthroughs

See Creating Managed Packages in Salesforce Help for more information.

See Considerations for Prompts in Lightning Experience in Salesforce Help for more information about installing and managing prompt packages and about editing and cloning prompts installed from packages.

If the package includes a custom profile or permission that isn't part of a Salesforce org, the in-app guidance is installed, but it doesn't include those custom items. For example, an org installs a prompt with several custom profiles not included in their org. The prompts are installed without those custom profiles.

If the package includes a standard app that isn't part of a Salesforce org, the in-app guidance is installed, but it's not usable.

Unmanaged packages must contain a namespace prefix. For more information, see Register a Namespace Prefix and What happens to my namespace prefix when I install a package? in Salesforce Help.

For walkthrough packages:

- If a managed or unmanaged package includes walkthroughs for standard apps, walkthroughs are installed. However, they aren't visible to users without subscribing to myTrailhead or starting a 30-day trial.
- If a security-reviewed, first-generation managed package includes walkthroughs with at least one step on a page within a custom app, users can see the walkthroughs without a subscription to myTrailhead or a trial.

When orgs install in-app guidance from packages, the in-app guidance will retain publish state as indicated by the `IsPublished` field. For example, if the package prompt is active, it will also be active when installed by the org.

Fields

Field	Details
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores.

Field	Details
	In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`Language`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates the language used in the org where the in-app guidance was created.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The master label.. Maximum of 80 characters.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.

PromptAction

Represents how the user interacted with the in-app guidance prompt or walkthrough. Available in API version 46.0 and later.

Use prompts and walkthroughs to display announcements, training, or news to users within the app. Choose to add an action button or link that links to a URL of your choice. Track views, action button clicks, and walkthrough completes.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Admins have access to add or edit prompts and walkthroughs. For non-admin users, assign the Manage Prompts and Modify Metadata Through Metadata API Functions user permission. Everyone can see the In-App Guidance setup page. To show walkthroughs to users, use the View Walkthroughs user permission, which is part of the Walkthroughs permission set license. The myTrailhead subscription includes this feature. For pricing details, contact your Salesforce account executive. But, you don't have to start the trial or purchase a license to create, preview, or package walkthroughs. Note the restrictions on user visibility of the walkthroughs you create in the Packaging and Prompts and Walkthroughs section.

Fields

Field	Details
`LastDisplayDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Indicates the date the in-app guidance was last displayed to the user.
`LastResult`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates the last user interaction. Valid values are: • `CustomAction` • `Dismiss` • `Error` • `Finish`—(walkthroughs only) • `NoAction` • `NotSeen`

Field	Details
	• `Snooze`
`LastResultDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Indicates the date the in-app guidance was last interacted with.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Name of the in-app guidance.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner.
`PromptVersionId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the PromptVersion object.
`SnoozeUntil`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The timestamp for when the user's snooze request expires. The user won't see the prompt again until the next scheduled time when they navigate to the page after the snooze time expires.
`StepCount`	**Type** int

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** Indicates the total number of steps in the walkthrough. Available in API version 49.0 and later.
StepNumber	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates the number of the last step the user viewed or interacted with in a walkthrough. Maximum value is 10. Available in API version 49.0 and later.
TimesActionTaken	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Number of times that the user took action on the in-app guidance.
TimesDismissed	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Number of times that the user dismissed the in-app guidance.
TimesDisplayed	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Number of times that the in-app guidance was displayed to the user.
TimesSnoozed	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The total number of times the user snoozes the prompt.

Field	Details
UserId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the user.

Associated Objects

This object has the following associated objects. They are available in API version 46.0 and later.

PromptActionOwnerSharingRule
Sharing rules are available for the object.

PromptActionShare
Sharing is available for the object.

PromptActionOwnerSharingRule

Represents a rule which determines `PromptAction` sharing access for the owners. Available in API version 46.0 and later.

Use prompts and walkthroughs to display announcements, training, or news to users within the app. Choose to add an action button or link that links to a URL of your choice. Track views, action button clicks, and walkthrough completes.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Admins have access to add or edit prompts and walkthroughs. For non-admin users, assign the Manage Prompts and Modify Metadata Through Metadata API Functions user permission. Everyone can see the In-App Guidance setup page. To show walkthroughs to users, use the View Walkthroughs user permission, which is part of the Walkthroughs permission set license. The myTrailhead subscription includes this feature. For pricing details, contact your Salesforce account executive. But, you don't have to start the trial or purchase a license to create, preview, or package walkthroughs. Note the restrictions on user visibility of the walkthroughs you create in the Packaging and Prompts and Walkthroughs section.

Fields

Field	Details
AccessLevel	**Type** picklist

Field	Details
	Properties Create, Filter, Group, Restricted picklist, Sort, Update **Description** Indicates the access level of users for in-app guidance. Valid values are `Read`, and `Edit`,.
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the in-app guidance. Maximum of 255 characters.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the group whose `PromptAction` are shared.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Name of the in-app guidance.

Field	Details
UserOrGroupID	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group with whom PromptAction access is shared.

PromptActionShare

Represents a sharing entry on a prompt action record. Available in API version 46.0 and later.

Use prompts and walkthroughs to display announcements, training, or news to users within the app. Choose to add an action button or link that links to a URL of your choice. Track views, action button clicks, and walkthrough completes.

Supported Calls

create(), delete(), describeSObjects(), query(), retrieve(), update(), upsert()

Special Access Rules

Admins have access to add or edit prompts and walkthroughs. For non-admin users, assign the Manage Prompts and Modify Metadata Through Metadata API Functions user permission. Everyone can see the In-App Guidance setup page. To show walkthroughs to users, use the View Walkthroughs user permission, which is part of the Walkthroughs permission set license. The myTrailhead subscription includes this feature. For pricing details, contact your Salesforce account executive. But, you don't have to start the trial or purchase a license to create, preview, or package walkthroughs. Note the restrictions on user visibility of the walkthroughs you create in the Packaging and Prompts and Walkthroughs section.

Fields

Field	Details
AccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Indicates the access level of users for in-app guidance. Valid values are Read, Edit, and All.
ParentId	**Type** reference

Field	Details
	Properties Create, Filter, Group, Sort **Description** ID of the parent.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can only write to this field when its value is either omitted or set to `Manual` (default). There are many possible values, including: • `Rule`—The User or Group has access via a sharing rule. • `GuestRule`—The User or Group has access via a guest user sharing rule. • `Manual`—The User or Group has access because a User with "All" access manually shared the prompt action with them. • `Owner`—The User is the owner of the prompt action.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the User or Group.

PromptLocalization

Represents the translated value of a label for record details about in-app guidance when the Translation Workbench is enabled for your org. Available in API version 48.0 and later.

Use prompts and walkthroughs to display announcements, training, or news to users within the app. Choose to add an action button or link that links to a URL of your choice. Track views, action button clicks, and walkthrough completes.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Admins have access to add or edit prompts and walkthroughs. For non-admin users, assign the Manage Prompts and Modify Metadata Through Metadata API Functions user permission. Everyone can see the In-App Guidance setup page. To show walkthroughs to users, use the View Walkthroughs user permission, which is part of the Walkthroughs permission set license. The myTrailhead subscription includes this feature. For pricing details, contact your Salesforce account executive. But, you don't have to start the trial or purchase a license to create, preview, or package walkthroughs. Note the restrictions on user visibility of the walkthroughs you create in the Packaging and Prompts and Walkthroughs section.

Packaging Prompts and Walkthroughs

See Creating Managed Packages in Salesforce Help for more information.

See Considerations for Prompts in Lightning Experience in Salesforce Help for more information about installing and managing prompt packages and about editing and cloning prompts installed from packages.

If the package includes a custom profile or permission that isn't part of a Salesforce org, the in-app guidance is installed, but it doesn't include those custom items. For example, an org installs a prompt with several custom profiles not included in their org. The prompts are installed without those custom profiles.

If the package includes a standard app that isn't part of a Salesforce org, the in-app guidance is installed, but it's not usable.

Unmanaged packages must contain a namespace prefix. For more information, see Register a Namespace Prefix and What happens to my namespace prefix when I install a package? in Salesforce Help.

For walkthrough packages:

- If a managed or unmanaged package includes walkthroughs for standard apps, walkthroughs are installed. However, they aren't visible to users without subscribing to myTrailhead or starting a 30-day trial.
- If a security-reviewed, first-generation managed package includes walkthroughs with at least one step on a page within a custom app, users can see the walkthroughs without a subscription to myTrailhead or a trial.

When orgs install in-app guidance from packages, the in-app guidance will retain publish state as indicated by the `IsPublished` field. For example, if the package prompt is active, it will also be active when installed by the org.

Fields

Field	Details
`Language`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** Indicates the language used in the org where the in-app guidance was created.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation.

Field	Details
	The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the in-app guidance.
`Value`	**Type** textarea **Properties** Create, Filter, Sort, Update **Description** The actual translated record details for the in-app guidance.

PromptVersion

Represents an in-app guidance prompt or walkthrough. Available in API version 46.0 and later.

Use prompts and walkthroughs to display announcements, training, or news to users within the app. Choose to add an action button or link that links to a URL of your choice. Track views, action button clicks, and walkthrough completes.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

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If the package includes a standard app that isn't part of a Salesforce org, the in-app guidance is installed, but it's not usable.

Unmanaged packages must contain a namespace prefix. For more information, see Register a Namespace Prefix and What happens to my namespace prefix when I install a package? in Salesforce Help.

For walkthrough packages:

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- If a security-reviewed, first-generation managed package includes walkthroughs with at least one step on a page within a custom app, users can see the walkthroughs without a subscription to myTrailhead or a trial.

When orgs install in-app guidance from packages, the in-app guidance will retain publish state as indicated by the `IsPublished` field. For example, if the package prompt is active, it will also be active when installed by the org.

Fields

Field	Details
`ActionButtonLabel`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Label for the action button. Maximum of 25 characters. For walkthroughs, this field can only be specified on the last step.
`ActionButtonLink`	**Type** url **Properties** Create, Filter, Nillable, Sort, Update **Description** URL for the action button. Maximum of 1,000 characters. You can't use the `GROUP BY` option in a SOQL query for this field. For walkthroughs, this field can only be specified on the last step.
`Body`	**Type** textarea

Field	Details
	Properties Create, Update **Description** Body content. For floating prompts, there's a maximum of 240 characters. For docked prompts, there's a maximum of 4000 characters. However, docked prompts use a rich text editor, so the maximum refers to the HTML markup, not the readable text.
`DelayDays`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Number of days between occurrences. For walkthroughs, this field can only be specified on the first step.
`Description`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of the in-app guidance. Maximum of 255 characters.
`DismissButtonLabel`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Label for the dismiss button of a floating prompt. Maximum of 15 characters.
`DisplayPosition`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates the position of the floating prompt on the page. Valid values are: • `TopLeft` • `TopCenter` • `TopRight` • `MiddleLeft` • `MiddleCenter` • `MiddleRight`

Field	Details
	• `BottomLeft` • `BottomCenter` • `BottomRight`
`DisplayType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Indicates the type of prompt. Valid values are: • `DockedComposer`—the docked prompt • `FloatingPanel`—the floating prompt
`EndDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates the date to stop showing the in-app guidance. For walkthroughs, this field can only be specified on the first step.
`Header`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Label for the header of the docked prompt. This is the label contained in the window's browser bar. Maximum of 36 characters.
`ImageAltText`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates the alt text of an image. Required if `ImageLocation` or `ImageID` is specified.
`ImageId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description The ID of the ContentAsset that holds the image. Required if `ImageLocation` or `ImageAltText` is specified.
`ImageLocation`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates the location of the image in relation to the body text. Required if `ImageID` or `ImageAltText` is specified. Valid values are: • `Top` • `Bottom` • `Right`—for floating prompts only • `Left`—for floating prompts only
`IndexWithIsPublished`	**Type** string **Properties** Filter, idLookup, Nillable, Sort **Description** Used by Salesforce for efficient querying.
`IndexWithoutIsPublished`	**Type** string **Properties** Filter, idLookup, Nillable, Sort **Description** Used by Salesforce for efficient querying.
`IsPublished`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates if the in-app guidance is active `yes` or not `no`.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update

Field	Details
	Description The master label. Maximum of 80 characters.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the in-app guidance.
`PublishedByUserId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the user who activated the in-app guidance. If the in-app guidance is part of a package, this is the user who installed the package.
`PublishedDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates the date the in-app guidance was activated. If the in-app guidance is part of a package, this is the date when the package was installed. For walkthroughs, this field can only be specified on the first step.
`ShouldDisplayActionButton`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates if an action button or link is included in the in-app guidance `yes` or not `no`.
`ShouldIgnoreGlobalDelay`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates if the prompt ignores the global time delay between in-app guidance and instead shows on page load `yes` or not `no`. The default is `no`.

Field	Details
StartDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates the date to start showing. For walkthroughs, this field can only be specified on the first step.
StepNumber	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates the number of the last step the user viewed or interacted with in a walkthrough. Maximum value is 10.
TargetAppDeveloperName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The app's developer name where the in-app guidance appears. Deprecated in API version 51.0.
TargetAppNamespacePrefix	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The app's namespace prefix where the in-app guidance appears. Must match the target app's NamespacePrefix in the org that the package is being installed into. Maximum of 15 characters. Deprecated in API version of 51.0.
TargetPageKey1	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Used by Salesforce to identify the page location along with targetPageKey2, targetPageKey3, and targetPageType.

Field	Details
TargetPageKey1Ref	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Used by Salesforce to identify the prompt's page location along with `targetPageKey2`, `targetPageKey3`, and `targetPageType`.
TargetPageKey2	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Used by Salesforce to identify the prompt's page location along with `targetPageKey1`, `targetPageKey3`, and `targetPageType`.
TargetPageKey3	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Used by Salesforce to identify the prompt's page location along with `targetPageKey1`, `targetPageKey2`, and `targetPageType`.
TargetPageType	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The type of page where the in-app guidance appears.
ThemeColor	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates which custom theme color is applied to in-app guidance. Required if `themeSaturation` is specified. Specify on the first step of the walkthrough to apply to the entire walkthrough. Valid values are: • `Theme1`—derived from the current brand color • `Theme2`—derived from the current page background color

Field	Details
	• `Theme3`—derived from the current global header color • `Theme4`—derived from the current app theme color
`ThemeSaturation`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates which color value, or saturation, is applied to in-app guidance that has a custom theme color applied. Required if `themeColor` is specified. Specify on the first step of the walkthrough to apply to the entire walkthrough. Valid values are: • `Dark` • `Light`
`TimesToDisplay`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Maximum number of times to display the in-app guidance (that is, the number of occurrences). Salesforce detects if the user interacts with (or ignores) the in-app guidance to determine if we should show the in-app guidance again or cancel scheduled recurrences. This may run counter to the number of occurrences scheduled. Maximum value of 30. For walkthroughs, this field can only be specified on the first step.
`Title`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The label for the title of the in-app guidance. Maximum of 36 characters.
`UserAccess`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates which permissions can see the in-app guidance. Valid values are: • `Everyone`—there are no restrictions on who can see • `SpecificPermissions`—only users with all the specific user permissions specified can see the in-app guidance

Field	Details
UserProfileAccess	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates which profiles can see the in-app guidance. Valid values are: • Everyone—there are no permission restrictions on who can see • SpecificProfiles—users with any of the specific user profiles specified can see the in-app guidance
VersionNumber	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The number remains 1 since multiple versions aren't saved in the org.
VideoLink	**Type** url **Properties** Create, Filter, Nillable, Sort, Update **Description** URL for the video in a docked prompt. Maximum of 1,000 characters. You can only specify this field or the ImageId field, not both. To find the embed code for a video, follow the instructions from the video host website. Usually the steps can be found by searching for the name of the website and "embed video." For example, here's what the embed code looks like for YouTube: <iframe width="560" height="315" src="https://www.youtube.com/embed/Ko-gcObzTVo" frameborder="0" allow="accelerometer; autoplay; encrypted-media; gyroscope; picture-in-picture" allowfullscreen></iframe> Then, you would enter the URL found in the src attribute. For the example used, enter *https://www.youtube.com/embed/Ko-gcObzTVo*.

PromptVersionLocalization

Represents the translated value of a label for-app guidance when the Translation Workbench is enabled for your org. Available in API version 48.0 and later.

Use prompts and walkthroughs to display announcements, training, or news to users within the app. Choose to add an action button or link that links to a URL of your choice. Track views, action button clicks, and walkthrough completes.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Admins have access to add or edit prompts and walkthroughs. For non-admin users, assign the Manage Prompts and Modify Metadata Through Metadata API Functions user permission. Everyone can see the In-App Guidance setup page. To show walkthroughs to users, use the View Walkthroughs user permission, which is part of the Walkthroughs permission set license. The myTrailhead subscription includes this feature. For pricing details, contact your Salesforce account executive. But, you don't have to start the trial or purchase a license to create, preview, or package walkthroughs. Note the restrictions on user visibility of the walkthroughs you create in the Packaging and Prompts and Walkthroughs section.

Packaging Prompts and Walkthroughs

See Creating Managed Packages in Salesforce Help for more information.

See Considerations for Prompts in Lightning Experience in Salesforce Help for more information about installing and managing prompt packages and about editing and cloning prompts installed from packages.

If the package includes a custom profile or permission that isn't part of a Salesforce org, the in-app guidance is installed, but it doesn't include those custom items. For example, an org installs a prompt with several custom profiles not included in their org. The prompts are installed without those custom profiles.

If the package includes a standard app that isn't part of a Salesforce org, the in-app guidance is installed, but it's not usable.

Unmanaged packages must contain a namespace prefix. For more information, see Register a Namespace Prefix and What happens to my namespace prefix when I install a package? in Salesforce Help.

For walkthrough packages:

- If a managed or unmanaged package includes walkthroughs for standard apps, walkthroughs are installed. However, they aren't visible to users without subscribing to myTrailhead or starting a 30-day trial.
- If a security-reviewed, first-generation managed package includes walkthroughs with at least one step on a page within a custom app, users can see the walkthroughs without a subscription to myTrailhead or a trial.

When orgs install in-app guidance from packages, the in-app guidance will retain publish state as indicated by the `IsPublished` field. For example, if the package prompt is active, it will also be active when installed by the org.

Fields

Field	Details
`Language`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort

Field	Details
	Description Indicates the language used in the org where the in-app guidance was created.
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, NamespacePrefix is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, NamespacePrefix is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the in-app guidance.
Value	**Type** textarea **Properties** Create, Filter, Sort, Update **Description** The actual translated label of the in-app guidance.

PushTopic

Represents a query that is the basis for notifying Streaming API clients of changes to records in an org. This object is available in API version 21.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- This object is available only if Streaming API is enabled for your org.
- Users with the Create permission can create this record.
- To receive notifications, users must have read access on both the object in the PushTopic query and the PushTopic itself.

Fields

Field	Details
`ApiVersion`	**Type** double **Properties** Create, Filter, Sort, Update **Description** Required. API version to use for executing the query specified in `Query`. It must be an API version greater than 20.0. If your query applies to a custom object from a package, this value must match the package's `ApiVersion`. Example value:
`Description`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the PushTopic. Limit: 400 characters
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the record currently counts towards the organization's allocation.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update

Field	Details
	Description Required. Descriptive name of the PushTopic, such as `MyNewCases` or `TeamUpdatedContacts`. Limit: 25 characters. This value identifies the channel and must be unique.
`NotifyForFields`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Specifies which fields are evaluated to generate a notification. Possible values are: • `All` • `Referenced` (default) • `Select` • `Where`
`NotifyForOperationCreate`	**Type** boolean **Properties** Create, Filter, Update **Description** `true` if a create operation should generate a notification, otherwise, `false`. Defaults to `true`. This field is available in API version 29.0 and later.
`NotifyForOperationDelete`	**Type** boolean **Properties** Create, Filter, Update **Description** `true` if a delete operation should generate a notification, otherwise, `false`. Defaults to `true`. Clients must connect using the `cometd/29.0` (or later) Streaming API endpoint to receive delete and undelete event notifications. This field is available in API version 29.0 and later.
`NotifyForOperationUndelete`	**Type** boolean **Properties** Create, Filter, Update **Description** `true` if an undelete operation should generate a notification, otherwise, `false`. Defaults to `true`. Clients must connect using the `cometd/29.0` (or later) Streaming API endpoint

Field	Details
	to receive delete and undelete event notifications. This field is available in API version 29.0 and later.
`NotifyForOperationUpdate`	**Type** boolean **Properties** Create, Filter, Update **Description** `true` if an update operation should generate a notification, otherwise, `false`. Defaults to `true`. This field is available in API version 29.0 and later.
`NotifyForOperations`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Specifies which record events may generate a notification. In API version 29.0 and later, this field is read-only, and doesn't contain information about delete and undelete events. Use `NotifyForOperationCreate`, `NotifyForOperationDelete`, `NotifyForOperationUndelete` and `NotifyForOperationUpdate` to specify which record events should generate a notification. Possible values are: • `All` (default) • `Create` • `Extended` • `Update` A value of `Extended` means that neither create or update operations are set to generate events.
`Query`	**Type** string **Properties** Create, Filter, Sort, Update **Description** Required. The SOQL query statement that determines which record changes trigger events to be sent to the channel. Limit: 1,300 characters

Usage

The PushTopic defines when notifications are generated in the channel. Determine which fields to configure by checking out these links in the *Streaming API Developer Guide*.

- PushTopic Queries
- Events
- Notifications

SEE ALSO:

Streaming API Developer Guide

QueueRoutingConfig

Represents the settings that determine how work items are routed to agents. This object is available in API version 32.0 and later.

Supported Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`

Special Access Rules

To access this object, Omni-Channel must be enabled.

As of Spring '20 and later, only authenticated internal and external users can access this object.

Fields

Field	Details
CapacityPercentage	**Type** percent **Properties** Create, Filter, Nillable, Sort, Update **Description** The percentage of an agent's capacity for work items that's consumed by a specific type of work item from this service channel. For example, you might give phone calls a capacity percentage of *100*. If an agent receives a phone call, the agent won't receive new work items until the call ends, because at that point the agent's capacity will have reached 100%. This field is available in API version 33.0 and later.
CapacityWeight	**Type** double

Field	Details
	Properties Create, Filter, Nillable, Sort, Update **Description** The amount of an agent's capacity for work items that's consumed by a work item from this service channel. For example, if an agent has a capacity of *6*, and cases are assigned a capacity weight of *2*, an agent can be assigned up to 3 cases before the agent is at capacity and can't receive new work items. This field is available in API version 33.0 and later.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`DropAdditionalSkillsTimeout`	**Type** int **Properties** Create, Filter, Group Nillable, Sort, Update **Description** The number of seconds to wait before a skill marked as **Additional Skill** is dropped from Omni-Channel routing. The case is then routed to the best-matched agent even if they don't have all the skills.
`IsAttributeBased`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this routing is attribute-based. Available in API version 45.0 and later.

Field	Details
Language	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the presence status.
MasterLabel	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The label of the presence status.
OverflowAssigneeId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the user or queue that's set as the Overflow Assignee.
PushTimeout	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The number of seconds set for push timeout. **0** is returned when push timeout isn't enabled. Available in API version 36.0 and later.
RoutingModel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The routing type that determines how work items are routed (pushed) to agents. Possible values are `Least Active` and `Most Available`.
RoutingPriority	**Type** int **Properties** Create, Filter, Group, Sort, Update

Field	Details
	Description The priority in which work items from the service channels that are related to this routing configuration are routed to agents. Work items from routing configurations that have lower priority values (for example, *0*) are routed to agents first.
ServiceChannelId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the service channel that's associated with this configuration. This field is available in API version 32.0 and earlier.

Question

Represents a question in a zone that users can view and reply to.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is only available if the Answers permission and AnswersEnabled preference or PortalFeed permission and PortalFeedEnabled preference are enabled in your org.

Fields

Field	Details
BestReplyId	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** The ID of the reply that has been identified as the best answer to the question. Use the user interface to identify the best answer for a question.
BestReplySelectedById	**Type** reference

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** The ID of the user who selected the best answer to the question. This field is available in API version 24.0 and later. In API version 24.0 through version 29.0, you must update this field using the UI. In API version 30.0 and later, you can update this field using the API.
`Body`	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of the question.
`CommunityId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The zone ID associated with the question. After you create a question, you can't change the zone ID associated with that question.
`CreatorFullPhotoUrl`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the user's profile photo from the feed. Chatter Answers must be enabled to view this field. This field is available in API version 26.0 and later.
`CreatorName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of the user who posted the question or reply. Only the first name of internal users (agents) appears to portal users in the feed. Chatter Answers must be enabled to view this field. This field is available in API version 26.0 and later.

Field	Details
CreatorSmallPhotoUrl	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the user's thumbnail photo from the feed. Chatter Answers must be enabled to view this field. This field is available in API version 26.0 and later.
HasSingleFieldForContent	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the content of a Chatter Answers question is: • Included in only one field: `Title` if the content is unformatted and less than 255 characters; or `Body` if the content is formatted or more than 255 characters (`true`) • Included in two fields: `Title` and `Body` (`false`) This field also determines if content displays in one or two fields in Chatter Answers question feeds. This field is available in API version 25.0 and later.
LastReferencedDate	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.
LastReplyDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time the last reply (child Reply object) was posted.
LastReplyId	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description Read only. The ID of the last reply (child Reply object) posted to the question.
LastViewedDate	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
MostReportAbusesOnReply	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The most number of user-reported abuses on a Reply associated with the question. This field is available in API version 24.0 and later.
NumReplies	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of replies (child Reply object) that users have submitted for the question.
NumReportAbuses	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Represents the number of user-reported abuses on the question. This field is available in API version 24.0 and later.
NumSubscriptions	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Represents the number of users following the question.

Field	Details
	This field is available in API version 24.0 and later.
`Origin`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The source of the question, such as `Chatter Answers`. This field is available in API version 24.0 and later.
`Title`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The descriptive title of the question.
`UpVotes`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The total number of up votes for the question.
`VoteScore`	**Type** double **Properties** Filter, Nillable, Sort **Description** The internal score of the question, used to sort questions and articles on the Popular tab in the application user interface. The internal algorithm that determines the score gives older votes less weight than newer votes, simulating exponential decay. The score itself doesn't display in the application user interface. Note: Unlike other fields of type double, you can't use a SOQL aggregate function with this field.

Usage

Use this object to track questions in a zone.

QuestionDataCategorySelection

A data category selection represents a data category that classifies a question.

This object can be used to associate a question with a data category from a data category group or to query the categorization for a question.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

To create, read or update data category selection, you must have create, read or update permission on the categorized question. Users who can update question can also delete its category selection. Users who can create questions can only select categories visible to their role.

Fields

Field Name	Details
`DataCategoryGroupName`	**Type** DataCategoryGroupReference **Properties** Create **Description** Unique name of the data category group which has a category associated with the question.
`DataCategoryName`	**Type** DataCategoryGroupReference **Properties** Create **Description** Unique name of the data category associated with the question.
`ParentId`	**Type** reference **Properties** Create, Filter **Description** ID of the question associated with the data category selection.

Usage

Every question can be categorized in a data category. You can use the QuestionDataCategorySelection object to query and manage question categorization. Client applications can create categorization for a question. They can also delete, query, and retrieve question categorization.

Warning: Even though the API lets you select more than one category for QuestionDataCategorySelection, the Answers tab only supports one data category selection for questions. Selecting multiple categories through QuestionDataCategorySelection may result in unexpected behavior in the Answers tab, such as losing your multiple selections. You should only select one data category when using QuestionDataCategorySelection.

Sample Code—Java

In the following example, the `selectCategory` method adds a category to a question data category selection. The `retrieveCategorySelections` method returns all the categories from a question data category selection.

```
public void selectCategory(ID parentId, String categoryGroupName, String categoryName) {
    try {
        QuestionDataCategorySelection categorySelection = new
QuestionDataCategorySelection();

        categorySelection.setParentId(parentId);
        categorySelection.setDataCategoryGroupName(categoryGroupName);
        categorySelection.setDataCategoryName(categoryName);
        binding.create(new SObject[]{categorySelection});
    } catch (RemoteException e) {
        System.out.println("An unexpected error has occurred." + e.getMessage());
    }
}

public String[] retrieveCategorySelections(String parentId) {
    QueryResult qr = null;

    try {
        qr = binding.query("SELECT DataCategoryName FROM QuestionDataCategorySelection
WHERE Id = '" + parentId + "'");
    } catch (RemoteException e) {
        System.out.println("An unexpected error has occurred." + e.getMessage());
    }

    String[] categoryNames = new String[qr.getRecords().length];
    for (int index = 0; index < qr.getRecords().length; index++) {
        categoryNames[index] =
((QuestionDataCategorySelection)qr.getRecords()[index]).getDataCategoryName();
    }

    return categoryNames;
}
```

Salesforce Knowledge uses a similar object for article data category selection. See *Article Type*__DataCategorySelection for SOQL examples using this object.

SEE ALSO:

Article Type__DataCategorySelection

QuestionReportAbuse

Represents a user-reported abuse on a Question in a Chatter Answers zone. This object is available in API version 24.0 and later.

Supported Calls

`create()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name of the Question from which the user reported abuse.
`QuestionId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the Question from which the user reported abuse.
`Reason`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The reason the user reported abuse on the Question, such as `Spam`, `Hateful`, or `Inappropriate`.

Usage

Use this object to track user-reported abuse on questions created in a Chatter Answers zone.

QuestionSubscription

Represents a subscription for a user following a Question. This object is available in API version 24.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
CommunityId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Required. ID of the zone associated with the Question the user is following. This field can't be updated.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** The name of the question subscription.
QuestionCreatedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Required. Creation date of the Question which the user is following. This field can't be updated.
QuestionId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Required. ID of the Question which the user is following. This field can't be updated.

Field	Details
SubscriberId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Required. ID of the User who is following the Question. This field can’t be updated.

Usage

Things to consider when following a Question:

- A user can only follow questions that they have permission to view.
- Administrators and users with the “Modify All Data” permission can configure other users to follow questions that the other user has read access to.
- Administrators and users with the “Modify All Data” permission can configure users to stop following questions.

Queries on QuestionSubscription:

- Users with the “Read” permission on Question can see which questions other users are following.
- A query must include a LIMIT clause and the limit can’t exceed 1,000.
- A query using a `WHERE` clause can only filter by fields on Question.

QueueSobject

Represents the mapping between a queue Group and the sObject types associated with the queue, including custom objects.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

As of Summer ’20 and later, only authenticated internal and external users can access this object.

A queue is a Group whose `Type` is `Queue`. To create a Group, you must have the Manage Users permission.

Fields

Field	Details
QueueId	**Type** reference **Properties** Create, Filter, Group, Sort

Field	Details
	Description The ID of a queue.
`SobjectType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** A list of object types that can be associated with the queue specified by the `QueueId`.

Usage

Use this object to associate a queue with the sObject that can be associated with the queue, including custom objects.

Warning: You can't update or insert more than 18 queues at once when using the Bulk API.

SEE ALSO:
Object Basics

QuickText

This object stores a snippet of text that allows users to send a quick response to a customer. Use quick text to create greetings, answers to common questions, short notes, and more. This object is available in API version 24.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`Category`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** A customizable picklist that can be used to group multiple related quick text records together

Field Name	Details
Channel	**Type** multipicklist **Properties** Create, Defaulted on create, Filter, Nillable, Update **Description** A multi-select picklist that can be used to specify where specific quick text messages are available, such as in Chat or in the Email publisher in Case Feed.
FolderId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Returns the ID of the folder that contains the quick text. Available in API version 44.0 and later.
FolderName	**Type** string **Properties** Filter, Nillable, Sort **Description** Name of the folder that contains the quick text. Available in API version 44.0 and later.
IsInsertable	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** If `true`, the quick text is available in the channels selected in the `Channel` field. If `false`, the quick text is not available. The label in the UI is **Include in selected channels**. By default: • This field is set to `true` on quick text records created from the Quick Text page or via the API. • This field is set to `false` on quick text records created during the Einstein Reply Recommendations reply publishing process.
LastReferencedDate	**Type** datetime **Properties** Filter, Nillable, Sort

Field Name	Details
	Description The timestamp when the current user last accessed this record, a record related to this record, or a list view.
`LastViewedDate`	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (`LastReferencedDate`) but not viewed it.
`Message`	**Type** textarea **Properties** Create, Filter (unavailable in API version 25.0 and later), Sort (unavailable in API version 25.0 and later), Update **Description** The content of the quick text record
`Name`	**Type** string **Properties** Create, Filter (unavailable in API version 25.0 and later), Group, idLookup, Sort (unavailable in API version 25.0 and later), Update **Description** A descriptive label for the quick text record
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the User or Queue that owns the quick text record
`ShouldPredictInRr`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field Name	Details
	Description (Used with Einstein Reply Recommendations.) Indicates whether the quick text can be recommended to agents in the Einstein Replies console component. The label in the UI is **Include in reply recommendations**. By default: • This field is set to `false` on quick text records created from the Quick Text page or via the API. • This field is set to `true` on quick text records created during the Einstein Reply Recommendations reply publishing process.
`SourceEntityId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** (Used with Einstein Reply Recommendations.) The corresponding ReplyText record that the quick text record was created from. This field is not available in the UI.
`SourceType`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** (Used with Einstein Reply Recommendations.) Indicates how the text was composed. This field is not available in the UI. Possible values are: • `EINSTEIN_GENERATED`—Text was generated by Einstein Reply Recommendations • `USER_EDITED`—Text was generated by Einstein Reply Recommendations, and then edited by a user • `USER_GENERATED`—User wrote the text

Usage

Use this object to create and manage the quick text messages available to users. You can categorize multiple quick text records into groups using the Category field. The Category field can also be a parent to multiple custom-dependent Picklist fields to create a hierarchical structure of categories.

QuickText is also used in Einstein Reply Recommendations, a feature that recommends stock replies for support agents to use in chats in the Lightning Service Console. During setup, Einstein Reply Recommendations scans past chats to generate a list of commonly used replies. Each generated reply is a ReplyText record. The admin then publishes, or converts, the replies to quick text, creating a corresponding QuickText record for each reply. Therefore, certain QuickText fields are used only on quick text records that originated as a ReplyText record.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

QuickTextHistory
History is available for tracked fields of the object.

QuickTextOwnerSharingRule
Sharing rules are available for the object.

QuickTextShare
Sharing is available for the object.

QuickTextUsage

Represents the usage of quick text on a record, including which quick text was used, who used it, and how they used it. This object is available in API version 47.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

This object is always read-only.

Fields

Field	Details
`AppContext`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Context in which the quick text was used. Possible values are: • `Aloha`—Salesforce Classic • `Lightning`—Lightning Experience • `Unknown`
`Channel`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The channel in which the quick text was used. Possible values are:

Field	Details
	• `Email` • `Event` • `Generic` • `Internal` • `Knowledge` • `Live Agent` • `Messaging` • `Phone` • `Portal` • `Social` • `Task`
`FolderId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the folder containing the quick text at the time it was used.
`LaunchSource`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** How the user started the quick text. Possible values are: • `Floater` • `Keyboard shortcut` • `Macro` • `Toolbar`
`LoggedTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time when the quick text was used.
`Name`	**Type** string

Field	Details
	Properties Filter, Group, idLookup, Sort **Description** Name of the quick text.
`OwnerId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the group or user that owns the quick text.
`QuickTextID`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the quick text.
`UserId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the user that used the quick text.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

QuickTextUsageOwnerSharingRule
Sharing rules are available for the object.

QuickTextUsageShare
Sharing is available for the object.

Quote

The Quote object represents a quote, which is a record showing proposed prices for products and services. Available in API version 18.0 and later.

Quotes can be created from and synced with opportunities, and emailed as PDFs to customers

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`AccountId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the account that's associated with the quote.
`AdditionalAddress`	**Type** address **Properties** Filter, Nillable **Description** Compound form of the additional address. Read-only. See Address Compound Fields for details on compound address fields.
`AdditionalCity`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** City for the quote's additional address. Up to 40 characters allowed.
`AdditionalCountry`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Country for the quote's additional address. Up to 80 characters allowed.
`AdditionalCountryCode`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ISO country code for the quote's additional address.

Field	Details
AdditionalLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `AdditionalLongitude` to specify the precise geolocation of an additional address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
AdditionalLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `AdditionalLatitude` to specify the precise geolocation of an additional address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places.
AdditionalName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name associated with the quote's additional address. Limited: 255 characters.
AdditionalPostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Postal Code for the quote's additional address.
AdditionalState	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** State for the quote's additional address. Up to 80 characters allowed.
AdditionalStateCode	**Type** picklist

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** ISO state code for the quote’s additional address.
AdditionalStreet	**Type** textarea **Properties** Create, Filter, Nillable, Group, Sort, Update **Description** Street name for the quote's additional address.
BillingAddress	**Type** address **Properties** Filter, Nillable **Description** Compound form of the billing address. Read-only. See Address Compound Fields for details on compound address fields.
BillingCity	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** City for the quote's billing address. Up to 40 characters allowed.
BillingCountry	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Country for the quote's billing address. Up to 80 characters allowed.
BillingCountryCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ISO country code for the quote’s billing address.

Field	Details
BillingLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `BillingLongitude` to specify the precise geolocation of a billing address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
BillingLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `BillingLatitude` to specify the precise geolocation of a billing address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places.
BillingName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Entity that the quote is billed to.
BillingPostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Postal Code for the quote's billing address.
BillingState	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** State for the quote's billing address. Up to 80 characters allowed.
BillingStateCode	**Type** picklist

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** ISO state code for the quote’s billing address.
BillingStreet	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Street name for the quote's billing address.
CanCreateQuoteLineItems	**Type** boolean **Properties** Create, Defaulted on create, Group **Description** This field is not used.
ContactId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the contact that’s associated with the quote.
ContractId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the contract that’s associated with the quote.
CurrencyIsoCode	**Type** picklist **Properties** Defaulted on create, Filter, Restricted picklist **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization.

Field	Details
	If the organization has multicurrency and a `Pricebook2Id` specified on the quote, then the currency value of this field must match the currency of the PricebookEntry objects that are associated with any quote line items it has. This value is copied from the related Opportunity and can't be changed.
`Description`	**Type** textarea **Properties** Nillable **Description** Text description of the quote. Limit: 32,000 characters.
`Discount`	**Type** percent **Properties** Filter, Nillable, Sort **Description** Difference between the sum of the QuoteLineItem record's`Subtotal` and the sum of the QuoteLineItem record's `Discount` totals. Expressed as a percentage.
`Email`	**Type** email **Properties** Filter, Group, Nillable, Sort **Description** The email address of the contact who's associated with the quote.
`ExpirationDate`	**Type** date **Properties** Create, Filter, Nillable, Update **Description** The date when this quote is no longer valid.
`Fax`	**Type** phone **Properties** Create, Filter, Nillable, Update **Description** The fax number for the contact who's associated with the quote.

Field	Details
GrandTotal	**Type** currency **Properties** Filter, Nillable **Description** The total price of the quote plus shipping and taxes.
IsSyncing	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the quote is syncing with an opportunity.
LastReferencedDate	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
LastViewedDate	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (LastReferencedDate) but not viewed it.
LineItemCount	**Type** int **Properties** Filter, Nillable **Description** The number of line items on the quote.
Name	**Type** string **Properties** Create, Filter, idLookup, Update

Field	Details
	Description Required. Name for the quote. Limit: 225 characters.
OpportunityId	**Type** reference **Properties** Create, Filter **Description** ID for the opportunity associated with the quote.
Phone	**Type** phone **Properties** Create, Filter, Nillable, Update **Description** The phone number of the contact who's associated with the quote.
Pricebook2Id	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the price book associated with the quote.
QuoteNumber	**Type** string **Properties** Defaulted on create, Filter **Description** A system-generated number that identifies the quote.
QuoteToAddress	**Type** address **Properties** Filter, Nillable **Description** Compound form of the quote to address. Read-only. See Address Compound Fields for details on compound address fields.
QuoteToCity	**Type** string

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** City for the address to send the quote to for approval, such as a third party-agency representing a buyer. Up to 40 characters allowed.
QuoteToCountry	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Country for the address to send the quote to for approval. Up to 80 characters allowed.
QuoteToLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with QuoteToLongitude to specify the precise geolocation of a quote to address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
QuoteToLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with QuoteToLatitude to specify the precise geolocation of a quote to address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places.
QuoteToName	**Type** string **Properties** Create, Filter, Nillable, Update **Description** The name of the entity (such as a person or business) that the quote is sent to for approval. Limit: 255 characters.
QuoteToPostalCode	**Type** string

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** Postal code for the address to send the quote to for approval.
QuoteToState	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** State for the address to send the quote to for approval. Up to 80 characters allowed.
QuoteToStreet	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Street name for the address to send the quote to for approval.
RecordTypeID	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the record type assigned to the object.
ShippingAddress	**Type** address **Properties** Filter, Nillable **Description** Compound form of the shipping address. Read-only. See Address Compound Fields for details on compound address fields.
ShippingCity	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** City for the quote's shipping address. Up to 40 characters allowed.

Field	Details
ShippingCountry	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Country for the quote's shipping address. Up to 80 characters allowed.
ShippingCountryCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ISO country code for the quote's shipping address.
ShippingHandling	**Type** currency **Properties** Create, Filter, Nillable, Update **Description** The total shipping and handling costs for the quote.
ShippingLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `ShippingLongitude` to specify the precise geolocation of a shipping address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
ShippingLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `ShippingLatitude` to specify the precise geolocation of an address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places.
ShippingName	**Type** string

Field	Details
	Properties Create, Filter, Nillable, Update **Description** The name of the entity (such as a person or business) that the quote is sent to for approval.
ShippingPostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Postal code for the quote's shipping address.
ShippingState	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** State for the quote's shipping address. Up to 80 characters allowed.
ShippingStateCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ISO state code for the quote’s shipping address.
ShippingStreet	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Street name for the quote's shipping address.
Status	**Type** picklist **Properties** Create, Defaulted on create, Filter, Nillable, Update **Description** The status of the quote. The standard options are: • —None—

Field	Details
	• Draft • Needs Review • In Review • Approved • Rejected • Presented • Accepted • Denied
`Subtotal`	**Type** currency **Properties** Filter, Nillable **Description** The sum of sales price multiplied by quantity for line items, not including the discount.
`Tax`	**Type** currency **Properties** Create, Filter, Nillable, Update **Description** The total taxes for the quote.
`TotalPrice`	**Type** currency **Properties** Filter, Nillable **Description** The total of the quote line items after discounts and before taxes and shipping.

Usage

Use Quote to manage proposed product prices for customers. To update a Quote, your client application needs "Edit" permission.

- Client applications can create, update, delete, and query Attachment records associated with a quote via the API.
- You can sync a quote and its parent Opportunity.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

QuoteFeed (API version 39.0)
Feed tracking is available for the object.

QuoteOwnerSharingRule (API version 41.0)
Sharing rules are available for the object.

QuoteShare (API version 41.0)
Sharing is available for the object.

SEE ALSO:

QuoteLineItem

QuoteDocument

Opportunity

QuoteDocument

Represents a quote in document format. Available in API version 18.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`

Fields

Field	Details
`ContentVersionDocumentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID for the document's version.
`CurrencyIsoCode`	**Type** picklist **Properties** Defaulted on create, Filter, Restricted picklist **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization. If the organization has multicurrency and a `Pricebook2Id` specified on the quote, then the currency value of this field must match the currency of the PricebookEntry objects that are associated with any quote line items it has.

Field	Details
`Discount`	**Type** percent **Properties** Filter, Nillable, Sort **Description** The discount for the quote used in the document.
`Document`	**Type** base64 **Properties** Create, Nillable **Description** The binary data of the document stored in the QuoteDocument object.
`GrandTotal`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Grand total for the quote used in the document.
`Name`	**Type** string **Properties** Filter, idLookup, Sort **Description** Name of the quote document.
`QuoteId`	**Type** reference **Properties** Create, Filter, GroupSort **Description** ID for the quote used for the document.

Usage

Use the QuoteDocument object to store a document that can be used to present the quote information to the customer.

SEE ALSO:

Quote

QuoteLineItem

QuoteLineItem

The QuoteLineItem object represents a quote line item, which is a member of the list of Product2 products associated with a Quote, along with other information about those line items on that quote. Available in API version 18.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

The user must have “Edit” permissions on Quote records in order to create or update quote line items on a quote. The user must have “Edit” permissions on Quote records to delete a quote line item.

Fields

Field	Details
`CurrencyIsoCode`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Available only for organizations enabled for multiples currencies. Contains the ISO code for any currency allowed by the organization. If the organization has multicurrency and a Pricebook2 is specified on the quote (the `Pricebook2Id` field is not blank), then the currency value of this field must match the currency of the PricebookEntry objects for any associated quote line items. This value is copied from the related Quote and can't be changed.
`Description`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description Text description of the line item. Limit: 225 characters.
`Discount`	**Type** percent **Properties** Create, Filter, Nillable, Sort, Update **Description** Editable number from 0 to 100.
`Division`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** A logical segment of your organization's data. For example, if your company is organized into different business units, you could create a division for each business unit, such as “North America,” “Healthcare,” or “Consulting.” Available only if the organization has the Division permission enabled.
`HasQuantitySchedule`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Read-only. Indicates whether the opportunity line item that the quote line item is synced with has a quantity schedule.
`HasRevenueSchedule`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Read-only. Indicates whether the opportunity line item that the quote line item is synced with has a revenue schedule. If this object has a revenue schedule, the `GrandTotal` and `TotalPrice` fields can't be updated. In addition, the `Quantity` field can't be updated if this object has a quantity schedule. The system ignores any attempt to update this field. The update isn't rejected but the updated value is ignored.
`HasSchedule`	**Type** boolean

Field	Details
	Properties Defaulted on create, Filter, Group, Sort **Description** Read-only. Indicates whether the line item uses schedules.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The most recent date on which a user referenced this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The most recent date on which a user viewed this record.
`LineNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** Read-only. Automatically generated number identifying the quote line item. In the form of `QL-XXXXX`.
`ListPrice`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Read-only. Corresponds to the `UnitPrice` on the PricebookEntry that is associated with this line item, which can be in the standard price book or a custom price book. A client application can use this information to show whether the unit price (or sales price) of the line item differs from the price book entry list price.
`OpportunityLineItemId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort

Field	Details
	Description ID of the related opportunity line item. This field is populated by the API during creation of the quote line item. Not editable. Available in API version 40.0 and later.
`PricebookEntryId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the associated PricebookEntry. Exists only for orgs with Products enabled. In API 38.0 and earlier, if `Product2Id` is populated with `PricebookEntryId` data, you receive an error message. In API 39.0 and later, `Product2Id` is made null, and `PricebookEntryId` is populated with the `PricebookEntryId` data.
`Product2Id`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the Product2 associated with this QuoteLineItem. In API 38.0 and earlier, if `Product2Id` is populated with `PricebookEntryId` data, you receive an error message. In API 39.0 and later, `Product2Id` is made null, and `PricebookEntryId` is populated with the `PricebookEntryId` data.
`Quantity`	**Type** double **Properties** Create, Filter, Sort, Update **Description** The number of units for the line item.
`QuoteId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the associated Quote.
`ServiceDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description Date when the product revenue will be recognized and the product quantity will be shipped.
`SortOrder`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The value of where the line item is in the sorted order, such as 1, 2, and so on. The SortOrder value determines the order in which a quote line item displays in the Quote Line Items related list and the Quote PDF. Client applications can use this to match the sort order in Salesforce. This field is only available in API versions 21.0 and greater.
`Subtotal`	**Type** currency **Properties** Filter, Nillable, Sort **Description** The line item's `Quantity` multiplied by the `UnitPrice`.
`TotalPrice`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Read-only. Calculated by applying the `Discount` to the `Subtotal`. This field is nillable, but you can't set both `TotalPrice` and `UnitPrice` to null in the same update. To insert the `TotalPrice` for a quote line item via the API (given only a unit price and the quantity), calculate this field as the unit price multiplied by the quantity. This field is read-only if the quote line item has a revenue schedule.
`UnitPrice`	**Type** currency **Properties** Create, Filter, Sort, Update **Description** The price per unit for the quote line item.

Usage

A Quote record can have QuoteLineItem records only if the Quote has a Pricebook2. A QuoteLineItem must correspond to a Product2 that is listed in the quote's Pricebook2.

Note: If the multicurrency option has been enabled, the `CurrencyIsoCode` field is present. It can't be modified, it is always set to the value of the `CurrencyIsoCode` of the parent Quote.

Effects on Quotes

Quotes that have associated QuoteLineItem objects are affected in the following ways:

- Creating a QuoteLineItem increments the Quote value by the `TotalPrice` of the QuoteLineItem.
- When you create or update a QuoteLineItem, the API verifies that the line item corresponds to a PricebookEntry in the Pricebook2 that is associated with the quote.

SEE ALSO:

Quote

QuoteDocument

Opportunity

RecentlyViewed

Represents records or list views that the current user has recently viewed or referenced (by viewing a related record). List views are available in API version 29.0 and later.

Supported Calls

`query()`, `update()update()`

Special Usage Rules

The RecentlyViewed object does not support the Event, Task, Report, KnowledgeArticle, and Article objects.

The RecentlyViewed object supports only certain objects, and supports list views only for those supported objects. Supported objects have the fields `LastReferencedDate` and `LastViewedDate`.

Fields

Field	Details
`Alias`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The alias on the record.
`Email`	**Type** email

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** The email address on the record.
`FirstName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The first name on the record. If the recently viewed record is a user, the value is the user's first name.
`Id`	**Type** ID **Properties** Defaulted on create, Filter, Group, Sort **Description** The ID of the recently viewed record or list view.
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the recently viewed record is an active user (`true`) or not (`false`). This field contains a value only if the recently viewed record is a user.
`LastName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The last name on the record.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort, Update **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.

Field	Details
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort, Update **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (`LastReferencedDate`) but not viewed it.
Name	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name on the recently viewed record or list view. If the recently viewed record is a user, contact, or lead, the value is a concatenation of the `firstname` and `lastname` field values.
NetworkId	**Type** reference **Properties** Filter,Group, Nillable, Sort **Description** ID of the Experience Cloud site that this group is part of. This field is available only if digital experiences is enabled in your org. You can add a `NetworkId` only when creating a group. You can't change or add a `NetworkId` for an existing group. This field is available in API version 27.0 and later.
Phone	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** The phone number on the record.
ProfileId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** If the recently viewed record is a user, this value is the user's profile ID.

Field	Details
Title	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** If the recently viewed record is a user, this value is the title of the user; for example CFO or CEO.
Type	**Type** picklist **Properties** Filter, Group, Nillable, Restricted, picklistSort **Description** The object type for this recently viewed record or list view. Valid values include any standard or custom objects that RecentlyViewed supports.
UserRoleId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the user role associated with this object.

Usage

This object provides a heterogeneous list of different object types. The list consists of recently viewed records, records that were recently referenced (a related record was viewed), or recently viewed list views. A record is considered viewed when the user sees the record details, but not when the user sees the record in a list with other records. Use this object to programmatically construct a list of recently viewed items specific to the current user. For example, use this object on a custom user interface or for search auto-complete options. You can also retrieve a filtered list of records by object type (`Type`). The RecentlyViewed data is periodically truncated down to 200 records and 200 list views per object. RecentlyViewed data is retained for 90 days, after which it is removed on a periodic basis.

Use this query in your code to retrieve a list of all the records and list views that were recently viewed. The results are ordered from most to least recent.

```
SELECT Id, Name
FROM RecentlyViewed
WHERE LastViewedDate !=null
ORDER BY LastViewedDate DESC
```

Use this query to retrieve data that was either viewed or referenced, but only for a limited set of objects.

```
SELECT Id, Name
FROM RecentlyViewed
WHERE Type IN ('Account', 'Contact', 'Plan__c')
ORDER BY LastViewedDate DESC
```

This query retrieves a list of all recently viewed contacts with contact-specific fields, such as the contact's account name, and the custom website field. Records are ordered from most to least recent.

```
SELECT Account.Name, Title, Email, Phone, Website__c
FROM Contact
WHERE LastViewedDate != NULL
ORDER BY LastViewedDate DESC
```

Recommendation

Represents the recommendations surfaced as offers and actions for Einstein Next Best Action. This object is available in API version 45.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

You must have the Modify All Data or Manage Next Best Action Recommendations user permission to create and edit recommendations.

Fields

Field	Details
`AcceptanceLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label that appears as the accept option on the surfaced recommendation. Maximum size is 80 characters.
`ActionReference`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Flow referenced for this recommendation. Label is **Action**.
`Description`	**Type** string **Properties** Create, Filter, Group, Sort, Update

Field	Details
	Description Text description of the recommendation. Maximum size is 255 characters.
ImageId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Image referenced by this recommendation. Label is **Image**.
IsActionActive	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the flow referenced in the Action field is active (true) or not (false). Read only.
LastReferencedDate	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The date and time when the recommendation was last referenced.
LastViewedDate	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The date and time when the recommendation was last viewed.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the recommendation. Maximum size is 80 characters.
NetworkId	**Type** reference

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** ID of the Experience Cloud site associated with the recommendation (if applicable).
RejectionLabel	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label that appears as the reject option on the surfaced recommendation. Maximum size is 80 characters.

RecordAction

Represents a relationship between a record and an action, such as a flow. Create a RecordAction for every action that you want to associate with a particular record. Available in API version 42.0 and later.

Note: Access to the RecordAction object is determined by a user's access to the associated parent record.

Supported Calls

`create()`, `delete()`,, `describeSObjects()`,`getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

As of Summer '20 and later, only authenticated internal and external users can access this object.

Fields

Field	Details
ActionDefinition	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Required in Lightning Flow for Service implementations that use version 44.0 or later of the API. The API name of the action to associate with the record; for example, the API name of

Field	Details
	a flow. Use this field rather than FlowDefinition. To distinguish a quick action from a flow with the same API name, we prepend "QuickAction" to the API name of every quick action.
`ActionType`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Required in Lightning Flow for Service implementations that use version 46.0 or later of the API. The type of action. Possible values are: • `Flow` (default) • `QuickAction` For versions of the API prior to version 46.0, this field is set to Flow.
`FlowDefinition`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Optional in Lightning Flow for Service implementations using version 42.0 or 43.0 of the API. An upgrade to Winter '19 or later, which uses API version 44.0 or later, copies FlowDefinition to ActionDefinition. For versions 42.0 and 43.0, this field is the API name of the flow that's associated with the record.
`FlowInterviewId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Optional. The flow interview ID of the paused or completed flow. This field can't be set in Process Builder.
`IsMandatory`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Optional. Specifies whether the action is mandatory. The default value is false. Note: At runtime, we show a reminder when the user closes a mandatory flow without completing it. We don't show the reminder for quick actions.

Field	Details
IsUiRemoveHidden	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Optional. Specifies whether the ability to remove the action is hidden in the UI. The default value is false. If true, the UI hides the ability to remove the action. However, actions can still be deleted using the API.
Order	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** Required. The order of the action among all actions associated with this record.
Pinned	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Required. Specifies whether the action is pinned to the top or bottom of the component. If an action is pinned, users see the Remove option in the UI unless `IsUiRemoveHidden` is set to true. Possible values are: • None (default) • Top • Bottom
RecordId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Required. Record associated with the action. In version 46.0 and above, we support most object types. To learn about supported objects, see the Lightning Flow for Service Developer's Guide.
Status	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update

Field	Details
	Description Required. The current state of the action. Possible values are: • `New` (default) • `Paused` • `Complete` • `Started` • `Unlinked`—The action was unlinked because the flow was paused and the current record for the flow interview changed. Paused and unlinked statuses do not apply to quick actions. This field can't be set in Process Builder.

Usage

The RecordAction object works with the Actions & Recommendations component in Lightning Experience. Although this junction object can be used to create relationships between records and actions in Salesforce Classic, those relationships can't be displayed in Salesforce Classic.

Note: API version 44.0 added a field, ActionDefinition, so that a RecordAction in future releases can support other types of actions in addition to flows. API version 44.0 and later maintain the FlowDefinition field to support processes that reference this field in earlier API versions. Upgrading an org to Winter '19 or later, which uses API version 44.0 or later, copies the FlowDefinition field to the ActionDefinition field. FlowDefinition will be deprecated in a future release, so use ActionDefinition instead.

When an action is deleted that's referenced in an ActionDefinition or FlowDefinition, the RecordAction object is deleted. RecordAction objects are also deleted when the associated parent record is deleted, or when a flow is paused and the current record context has changed. When an action is completed, the associated RecordAction object is also deleted.

Deleted RecordActions are removed from the list when the page is refreshed.

For more information about the Actions & Recommendations component and how it works with RecordActions, see the Lightning Flow for Service Developer Guide.

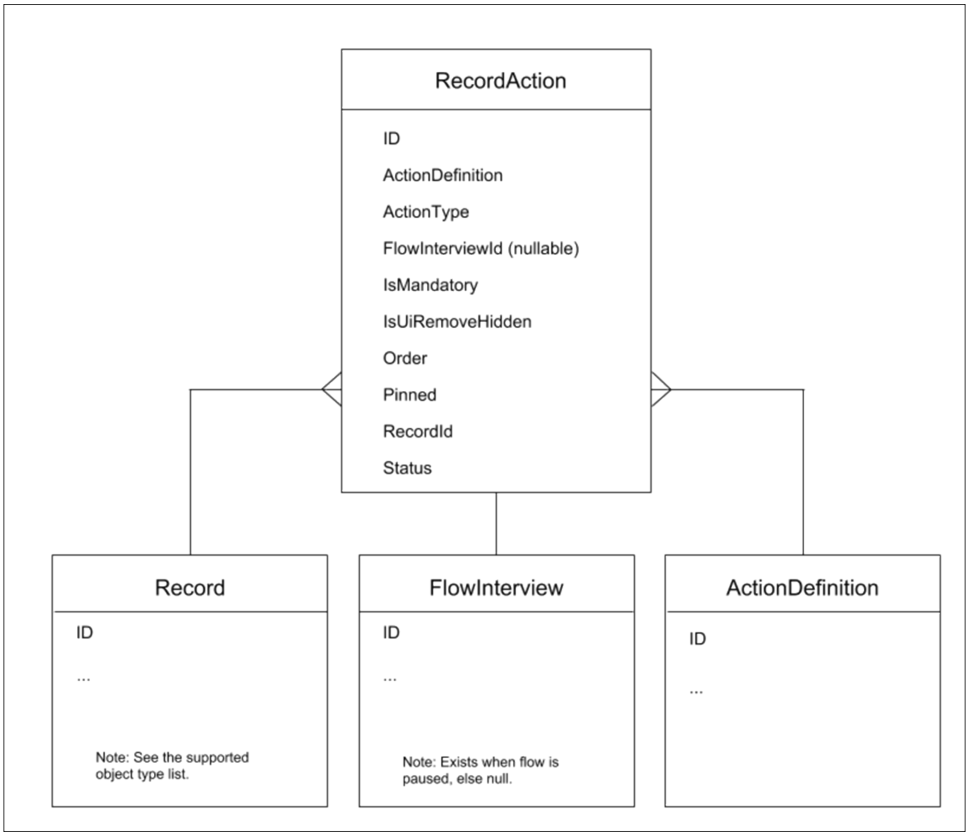
Java Example

Here's an example of how to associate flows to a record using the RecordAction object.

```
public void associateNewCustomerFlowWithAccount(Account a) {
   try {
      RecordAction newRecordAction = new RecordAction();
      newRecordAction.setRecordId(a.getId());
      newRecordAction.setActionDefinition("New_Customer_Flow");
      newRecordAction.setOrder(1);

      SaveResult[] results = connection
            .create(new SObject[] { newRecordAction });
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Data Model



Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

RecordActionHistory
History is available for tracked fields of the object.

RecordActionHistory

Represents the lifecycle of a RecordAction as it goes through different states. Available in API version 44.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Special Access Rules

This object is always read-only.

Fields

Field	Details
ActionDefinitionApiName	**Type** string **Description** Required. The API name of the action associated with the record. To distinguish a quick action from a flow with the same API name, we prepend "QuickAction" to the API name of every quick action.
ActionDefinitionLabel	**Type** string **Description** Required. The label of the action that took place.
ActionType	**Type** picklist **Properties** Defaulted on create, Restricted picklist **Description** Required. The type of action associated with the record. Possible values are: • `Flow` (default) • `QuickAction`
IsMandatory	**Type** boolean **Properties** Defaulted on create **Description** Optional. Specifies whether the action is mandatory. The default value is false.
LoggedTime	**Type** dateTime **Properties** Filter, Sort **Description** Required. The timestamp when the state change occurred.

Field	Details
ParentRecordId	**Type** reference **Properties** Filter, Sort **Description** Required. The parent record for the associated action.
Pinned	**Type** picklist **Properties** Defaulted on create, Nillable, Restricted picklist **Description** Optional. Specifies whether the action is pinned to the top or bottom, or unpinned. Possible values are: • None • Top • Bottom
RecordActionId	**Type** string **Properties** Filter, Sort **Description** Required. The ID of the RecordAction.
State	**Type** picklist **Properties** Defaulted on create, Restricted picklist **Description** Required. The state of the action. A state change triggers the logging of a history event. Possible values are: • `New` (default) • `Paused` • `Complete` • `Started` • `Unlinked`—The action was unlinked because the flow was paused and the current record for the flow interview changed.
UserId	**Type** reference

Field	Details
	Description Required. The user that conducted the action.

Usage

The RecordActionHistory object represents the lifecycle of an action on a record as it goes through different states.

The RecordActionHistory object is a big object. For this reason, when you use synchronous SOQL, SOAP, REST, Bulk, or Apex APIs to read this object, queries must follow a specific pattern or they fail. Queries must match one of these patterns and use fields in this precise order when more than one field is used.

- ParentRecordId
- ParentRecordId, LoggedTime (DESC)
- ParentRecordId, LoggedTime (DESC), RecordActionId

For example, this SOQL query follows the ParentRecordId, LoggedTime (DESC) pattern.

```
SELECT ActionDefinitionApiName, User, State FROM RecordActionHistory WHERE
          ParentRecordId = {CaseId} ORDER BY ParentRecordId, LoggedTime DESC
```

Asynchronous SOQL queries do not need to follow a pattern, and can query any field.

Apex triggers cannot reference big object records. Use SOQL queries if you want to query RecordActionHistory records in Apex.

For more information about the Actions & Recommendations component and how it works with RecordActions, see the Lightning Flow for Service Developer Guide. Learn more about big objects and how to query them in the Query Big Objects module on Trailhead.

Java Example

Here's a Java example of how to query a RecordActionHistory object.

```
public void queryHBPOs(String parentRecordId) {
   try {
    SimpleDateFormat format = new SimpleDateFormat("yyyy-MM-dd");

       // query for the RecordActionHistory associated with ParentRecord
       QueryResult queryResults = connection.query("SELECT ActionDefinitionApiName,
LoggedTime, State " +
         "FROM RecordActionHistory WHERE ParentRecordId = '" + parentRecordId + "' LIMIT
50");
       if (queryResults.getSize() > 0) {
         for (int i=0;i<queryResults.getRecords().length;i++) {
           // cast the SObject to a strongly-typed RecordActionHistory
           RecordActionHistory raa = (RecordActionHistory)queryResults.getRecords()[i];
          System.out.println("ActionDefinitionApiName: " + raa.getActionDefinitionApiName()
 + " - LoggedTime: "+ format.format(raa.getLoggedTime().getTime()) + " - State: " +
               raa.getState());
         }
       }
   } catch (Exception e) {
       e.printStackTrace();
```

```
    }
  }
```

RecordsetFilterCriteria

Represents a set of filters on service appointment fields to associate with shifts. Only service appointments that satisfy the filter criteria are assigned to those shifts. This object is available in API version 50.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** The description of the service appointment filter criteria.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the recordset filter criteria is associated with shifts (`true`) or not (`false`).
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the recordset filter criteria was last referenced.

Field	Details
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the recordset filter criteria was last viewed.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the recordset filter criteria.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The owner of the recordset filter criteria.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

RecordsetFilterCriteriaFeed
Feed tracking is available for the object.

RecordsetFilterCriteriaHistory
History is available for tracked fields of the object.

RecordsetFilterCriteriaOwnerSharingRule
Sharing rules are available for the object.

RecordsetFilterCriteriaShare
Sharing is available for the object.

RecordsetFilterCriteriaRule

Represents a rule on a service appointment filter for shifts. This is associated with the RecordsetFilterCriteria object. This object is available in API version 50.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field	Details
`CriteriaField`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The Service Appointment field the filter rule is applied to.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the recordset filter criteria rule was last referenced.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the recordset filter criteria rule was last viewed.
`RecordsetFilterCriteriaId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the RecordsetFilterCriteria record to associate this rule with.
`RecordsetFilterCriteriaRuleNumber`	**Type** string

Field	Details
	Properties Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The automatically assigned number of the recordset filter criteria rule.
`Value`	**Type** textarea **Properties** Create, Nillable, Update **Description** The expected value of `CriteriaField` applied to the filter rule.

Usage

If you want to create a filter rule for service appointments with a dispatched status, set `CriteriaField` to `ServiceAppointment.Status` and `Value` to `Dispatched`. Then add the ID from a RecordsetFilterCriteria record to `RecordsetFilterCriteriaId` to associate this rule with a filter criteria for shifts.

RecordType

Represents a record type.

Supported Calls

`create()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Important: Don't use record types as an access control mechanism. Profile assignment governs create and edit access for an object but doesn't govern read access. For example, a user assigned to a profile that isn't enabled for a particular record type can't create records with that record type, but can access records associated with that record type. Users with access to an object can read all record type information for that object. We strongly recommend against storing sensitive information in the record type description, name, or label. Instead, store sensitive information in a separate object or fields to which you've applied appropriate access controls.

Field	Details
`BusinessProcessId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description Required for Opportunity and Lead record types in API version 17.0 and later. ID of an associated BusinessProcess.
`Description`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A description of this record. Limit: 255 characters.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is **Record Type Name**. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this record is active (`true`) or not (`false`). Only active record types can be applied to records. Label is **Active**.
`IsPersonType`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this record has been designated as a person account (`true`) or not (`false`). Visible only if the organization has the person account feature enabled.

Field	Details
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. Label of the record type in the user interface. Limit: 80 characters. Label is **Record Type Label**.
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
SobjectType	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** Object to which this record type applies, including custom objects.

Usage

Use this object to offer different BusinessProcess records and subsets of picklist values to different users based on their Profile. Your client application can describe or query RecordType records.

The following objects have a `RecordTypeId` field:

- Account
- Campaign

- CampaignMember
- Case
- Contact
- Contract
- Lead
- Opportunity
- QuickText
- Solution
- Custom objects

Client applications can create or update values in `RecordTypeId` on these objects, specifying a valid record type ID associated with these objects.

Note: You can't create or update the `RecordTypeId` field on the CampaignMember records. Set the CampaignMember record type using the `CampaignMemberRecordTypeId` field on Campaign.

A client application can retrieve the list of valid record type IDs for a given object by querying the RecordType.

SEE ALSO:

Record Type Objects

RecordTypeLocalization

Represents the translated value of a label for a record type when the Translation Workbench is enabled for your organization.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- Your organization must be using Professional, Enterprise, Developer, Unlimited, or Performance Edition and be enabled for the Translation Workbench.
- To view this object, you must have the "View Setup and Configuration" permission.

Fields

Field	Details
`Language`	**Type** string **Properties** Create, Filter, Nillable, Restricted picklist

Field	Details
	Description The language for this translated label.
NamespacePrefix	**Type** string **Properties** Filter, Nillable **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, NamespacePrefix is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, NamespacePrefix is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
ParentId	**Type** reference **Properties** Create, Filter, Nillable **Description** The ID of the RecordType associated with the label that is being translated.
Value	**Type** string **Properties** Create, Filter, Nillable, Update **Description** The actual translated label for the record type. Label is **Translation**.

Usage

Use this object to translate the labels of your record types into other supported languages.

RecordVisibility (Pilot)

Represents the visibility attributes that determine a record's read access. This object is read only and is available in API version 46.0 and later.

Supported Calls

`describeSObjects()`, `query()`

Special Access Rules

To access this object, you need an Einstein Analytics license or to contact Salesforce to participate in the pilot program. You must also have the "View All Data" or "Enable RecordVisibility API" user permission.

Note: We provide the RecordVisibility object to selected customers through a pilot program that requires agreement to specific terms and conditions. To be nominated to participate in the program, contact Salesforce. Pilot programs are subject to change, and we can't guarantee acceptance. The RecordVisibility object isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features. You can provide feedback and suggestions for the RecordVisibility object in the group in the Trailblazer Community.

Fields

Field Name	Details
RecordId	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The ID of the record.
VisibilityAttribute	**Type** string **Properties** Filter, Nillable, Sort **Description** The visibility attributes that determine the read access of a given record. For example, a user ID, parent record ID, or group ID. The output of visibility attributes is in JSON format and must be deserialized.

Usage

Use this object to query the attributes that determine the visibility of one or more records. You can't create, delete, or update any records using this object.

Up to 200 record IDs can be queried. You can include an `ORDER BY` clause for any field that is being selected in the query.

This sample query returns the visibility attributes for the indicated record.

```
SELECT RecordId, VisibilityAttribute
FROM RecordVisibility
WHERE RecordId=[single ID]      // or Record IN [list of IDs]
```

The `RecordId` and `VisibilityAttribute` fields must be a part of the fields that are being selected despite `RecordId` being used in the filter criteria as well.

RecordVisibility is a foreign key on the records. This query returns the visibility attributes for Account records:

```
SELECT Id, Name, RecordVisibility.VisibilityAttribute
FROM Account
```

You can't filter `RecordId` fields when using RecordVisibility as a lookup or foreign key.

You can use `RecordVisibilityContext` to filter `WITH` clauses in queries. For more information, see `WITH` *filteringExpression* in the *SOQL and SOSL Reference*.

RedirectWhitelistUrl

Represents a trusted URL that users can navigate to without being shown a warning message. This object is available in API version 48.0 and later.

Important: Where possible, we changed noninclusive terms to align with our company value of Equality. Because changing terms in our code can break current implementations, we maintained this object's name.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Only authenticated internal and external users with the View Setup and Configuration permission can access this object, and only users with the Customize Application permission can edit it.

Fields

Field	Details
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update

Field	Details
	Description The unique name of the custom help section in the API. This name can contain only underscores and alphanumeric characters and must be unique in your organization. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. The label corresponds to section title in the user interface. Limit: 80 characters. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`Language`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Language of the label. Possible values are: • `da`—Danish • `de`—German • `en_US`—English • `es`—Spanish • `es_MX`—Spanish (Mexico) • `fi`—Finnish • `fr`—French • `it`—Italian • `ja`—Japanese • `ko`—Korean • `nl_NL`—Dutch • `no`—Norwegian • `pt_BR`—Portuguese (Brazil) • `ru`—Russian • `sv`—Swedish • `th`—Thai • `zh_CN`—Chinese (Simplified) • `zh_TW`—Chinese (Traditional)
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update

Field	Details
	Description The label of the trusted URL.
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
Url	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The trusted URL.

Refund

Represents a refund made against a payment. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

To access Commerce Payments entities, your org must have a Salesforce Order Management license with the Payment Platform org permission activated.

Fields

Field	Details
AccountId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The customer account containing the payment that this refund targets.
Amount	**Type** currency **Properties** Create, Filter, Sort, Update **Description** Total amount of this refund.
Balance	**Type** currency **Properties** Filter, Nillable, Sort **Description** Remaining balance following refund line applications. Equal to the Amount field – the Net Applied field.
CancellationDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date that the refund was canceled. This is a required parameter for void services.
CancellationEffectiveDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date that the cancellation of this refund takes effect.

Field	Details
CancellationGatewayDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date when the cancellation transaction was processed in the payment gateway.
CancellationGatewayRefNumber	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Unique ID for the cancellation transaction. Generated by the payment gateway.
CancellationGatewayResultCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Gateway-specific result code for the cancellation transaction. Generated by the payment gateway. Must be mapped to a Salesforce-specific result code.
CancellationSfResultCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Salesforce-specific result code that can map to one or more gateway result codes. We recommend configuring the payment gateway adapter layer to map gateway result codes to the appropriate Salesforce result code.
ClientContext	**Type** textarea **Properties** Nillable **Description** Contains caller context for payment APIs. Useful for re-establishing context during an asynchronous payment transaction.
Comments	**Type** textarea

Field	Details
	Properties Create, Filter, Nillable, Sort, Update **Description** Users can add comments to provide additional details about a record. Maximum of 1000 characters.
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Three-letter ISO 4217 currency code associated with the payment group record.
`Date`	**Type** dateTime **Properties** Create, Defaulted on create, Filter, Nillable, Sort, Update **Description** The date and time that this refund was created.
`EffectiveDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Defines the date and time when the refund application becomes effective.
`Email`	**Type** email **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Fraud parameter.
`GatewayDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date that a successful gateway communication caused the creation of this refund.

Field	Details
GatewayRefNumber	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Unique transaction ID created by the payment gateway.
GatewayResultCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Gateway-specific result code. Must be mapped to a Salesforce-specific result code.
GatewayResultCodeDescription	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of the GatewayResultCode. Useful for providing additional context as to why the gateway returned a specific result code.
ImpactAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Shows the refund's financial impact against the customer's accounts receivable. Equals the refund's Amount field if the refund amount is valid. Equals 0 when the refund amount is void. Has a null value when the refund is canceled.
IpAddress	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Fraud parameter.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort

Field	Details
	Description The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
MacAddress	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Fraud parameter.
NetApplied	**Type** currency **Properties** Filter, Nillable, Sort **Description** Equals the Total Applied field – the Total Unapplied field.
OrderPaymentSummaryId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Order payment summary record that shows the balances of each authorization, capture, and refund made against an order.
PaymentGatewayId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The payment gateway used to process this refund.
PaymentGroupId	**Type** reference

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The payment group for the payment being refunded.
PaymentMethodId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The payment method used to create the payment being refunded.
Phone	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Fraud parameter.
ProcessingMode	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** Defines whether the payment has been made outside of the payment platform. Possible values are: • External: Transactions happened outside of the Salesforce payments platform. • Salesforce: Salesforce made and recorded an external call to the payment gateway.
RefundNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** System-created unique ID for this refund.
SfResultCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update

Field	Details
	Description Salesforce-specific result code that can map to one or more gateway result codes. We recommend configuring the payment gateway adapter layer to map gateway result codes to the appropriate Salesforce result code. Possible values are: • `Decline`: The gateway call failed, but it may still work if the transaction is attempted again. For example, the customer had insufficient funds or briefly lost their connection. • `Indeterminate`: The gateway didn't respond to the call. This response usually happens when Salesforce times out while waiting for a response from the gateway. • `PermanentFail`: The gateway call failed and won't work even if tried again. Gateway calls fail permanently for one of two reasons: – Hard Decline: The customer's payment account has been closed or terminated. – Fraud: The gateway recognized the payment or payment method as known fraud. • `RequiresReview`: The customer bank requires more information before completing the payment. • `Success`: The gateway call succeeded. • `SystemError`: Salesforce ended the payment request before receiving a response. For example, Salesforce lost credentials or access to its server. Salesforce ends payment calls if it doesn't receive a response from the gateway within two minutes. • `ValidationError`: Customer payment data was incorrect, such as a misspelling in the credit card address or an incorrect CVV.
`Status`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Defines the state of this refund. Possible values are: • `Canceled`: This refund has been voided and can no longer be allocated. • `Draft`: The refund can be edited before posting it and allocating it to a target. • `Processed`: This refund has been finalized and can be allocated against a target. Users can manually change the Status field's values as follows: • Draft to Processed • Processed to Canceled • Draft to Canceled
`TotalApplied`	**Type** currency

Field	Details
	Properties Filter, Nillable, Sort **Description** The sum of Amount fields across all of this refund's applied refund lines.
`TotalUnapplied`	**Type** currency **Properties** Filter, Nillable, Sort **Description** The sum of Amount fields across all of this refund's unapplied refund lines.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Defines how this refund is used. Possible values are: • `NonReferenced`: Standalone refund not linked to any payment. • `Referenced`: Refund made against a payment.

RefundLinePayment

A refund line that has been applied to a payment. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

To access Commerce Payments entities, your org must have a Salesforce Order Management license with the Payment Platform org permission activated.

Fields

Field	Details
`Amount`	**Type** currency **Properties** Create, Filter, Sort **Description** The total amount applied to or unapplied from a payment by the refund line.
`AppliedDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort **Description** The date that the refund was applied to the linked payment.
`AssociatedAccountId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The account for the payment that received the refund.
`AssociatedRefundLinePaymentId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The refundLine that was unapplied. Populated only when RefundLinePayment's Type has a value of Unapplied.
`Comments`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Users can add comments to provide additional information on the refund line payment.
`Date`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort

Field	Details
	Description By default, the day the refund line payment record was created. Users can also enter a different date.
EffectiveDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort **Description** Defines the date and time when the refund line application or unapplication becomes effective.
EffectiveImpactAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Shows how this payment refund line impacts a customer's accounts receivable. This value is positive when RefundLinePayment's Type field is Applied, and negative when RefundLinePayment's Type is Unapplied. If there's an unapplied line related to this record, EffectiveImpactAmount has a value of 0. Note: EffectiveImpactAmount evaluates only the applied and unapplied line pair. Therefore, the effective impact amount could be different for different lines within the same refund.
HasBeenUnapplied	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** Shows whether this refund line has been unapplied. Possible values are: • No
ImpactAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Shows how this payment refund line impacts a customer's accounts receivable. This value is positive when RefundLinePayment's Type field is Applied, and negative when RefundLinePayment's Type is Unapplied.

Field	Details
PaymentBalance	**Type** currency **Properties** Filter, Nillable, Sort **Description** The payment record's balance following the application or unapplication of this refund line.
PaymentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The payment record that this refund line targets. Refund applications and unapplications are made against this payment.
RefundBalance	**Type** currency **Properties** Filter, Nillable, Sort **Description** The refund record's balance following the application or unapplication of this payment refund line.
RefundId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The parent refund of this refund line.
RefundLinePaymentNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** System-created unique ID for this refund line.
Type	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort

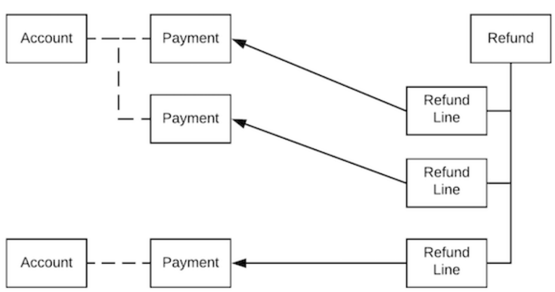
Field	Details
	Description Defines whether this line represents a refund that's been applied or unapplied from a payment. Possible values are: • `Applied`
`UnappliedDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort **Description** The date that this refund line was unapplied from a payment.

Usage

When you're ready to apply a refund's balance to a payment, create a refund line (`RefundLinePayment`). The refund line represents the balance taken from the payment and applied toward the invoice. You can apply a refund's balance when you create the refund record or afterward. The refund line must have the same currency as the parent refund.

A refund has an amount, which represents the total amount taken from the refund, and a balance, which represents the remaining amount after the refund line has been applied to a payment. A refund's amount can't be less than the sum of all of its refund line amounts. You can apply any portion of a refund's balance to a payment.

You can apply a refund to transactions on the same account or to different transacations across different



accounts.

RegisteredExternalService

Represents a registered external service used for checkout integrations by data integrators. This object is available in API version 49.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

The RegisteredExternalService object is available only if the B2B Commerce on Lightning Experience license is enabled.

Fields

Field	Details
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization.
`ExternalServiceProviderId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of an Apex class that implements one of the following interfaces: • sfdc_checkout.CartInventoryValidation • sfdc_checkout.CartPriceCalculations • sfdc_checkout.CartShippingCharges • sfdc_checkout.CartTaxCalculations
`ExternalServiceProviderType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The types of external service providers. Possible values are: • `Inventory` • `Price` • `Shipment` • `Tax`

Field	Details
MasterLabel	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The master label for the registered external service.

RemoteKeyCalloutEvent

The documentation has moved to RemoteKeyCalloutEvent in the *Platform Events Developer Guide*.

Reply

Represents a reply that a user has submitted to a question in an answers zone.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
Body	**Type** textarea **Properties** Create, Update **Description** Body of this reply.
CommunityId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The zone ID associated with the question and its reply. This field is available in API version 27.0 and later.

Field	Details
CreatorFullPhotoUrl	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the user's profile photo from the feed. Chatter Answers must be enabled to view this field. This field is available in API version 26.0 and later.
CreatorName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of the user who posted the question or reply. Only the first name of internal users (agents) appears to portal users in the feed. Chatter Answers must be enabled to view this field. This field is available in API version 26.0 and later
CreatorSmallPhotoUrl	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the user's thumbnail photo from the feed. Chatter Answers must be enabled to view this field. This field is available in API version 26.0 and later.
DownVotes	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The total number of down votes for a reply.
Name	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** When creating a Reply, the `Name` field is automatically populated with a truncated, plain text version of the Reply `Body` field.

Field	Details
`NumReportAbuses`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Represents the number of reported abuses on the reply by users. This field is available in API version 24.0 and later.
`QuestionId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the Question to which this reply was made.
`UpVotes`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The total number of up votes for a reply.
`VoteTotal`	**Type** double **Properties** Filter, Nillable, Sort **Description** The total number of all votes for a reply, including up and down votes.

Usage

Use this object to track replies to a Question.

ReplyReportAbuse

Represents a user-reported abuse on a Reply in a Chatter Answers zone. This object is available in API version 24.0 and later.

Supported Calls

`create()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name of the Reply from which the user reported abuse.
`Reason`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The reason the user reported abuse on the Reply, such as `Spam`, `Hateful`, or `Inappropriate`.
`ReplyId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the Reply from which the user reported abuse.

Usage

Use this object to track user-reported abuse on replies created in a Chatter Answers zone.

ReplyText

A text reply generated by Einstein Reply Recommendations that is based on closed chat transcripts. Admins review replies and publish them to quick text, editing them as needed. Einstein recommends relevant published replies to support agents in the Lightning Service Console, and agents can insert replies into chats or messaging sessions. This object is available in API version 49.0 and later.

Important: Because the replies generated by Einstein are taken from closed chats with your customers, they may contain customer data. You can edit replies before they are recommended to agents.

Supported Calls

`delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`

Fields

Field	Details
Language	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The language used in the reply. This field is available in API version 51.0 and later. Possible values are languages supported in Einstein Reply Recommendations.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** Eight-digit auto-generated number identifying the reply.
RawTextMessage	**Type** textarea **Properties** **Description** The text of the reply.
Source	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Indicates who last modified the reply. Possible values are: • EINSTEIN_GENERATED—Reply was generated by Einstein and has not been edited. • USER_EDITED—Reply was generated by Einstein and then edited by a user. • USER_GENERATED—This value is not currently in use.
Status	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The status of the reply. Possible values are:

Field	Details
	• NEW—Einstein has generated the reply and it hasn't yet been published. • PUBLISHED—The reply has been published to quick text. When the reply recommendation model is activated, the reply can be recommended to support agents. • PUBLISH_FAILED— An attempt to publish the reply to quick text failed. Publishing failure can be due to validation errors, access errors, or corrupted files. To hide the reply from the list of generated replies, delete it.

Usage

To get started with Einstein Reply Recommendations, create a predictive model that analyzes closed chats for frequently used text snippets. When the model is ready, Einstein generates a list of these snippets as ReplyText records for you to review and publish, or convert, to quick text. ReplyText records appear on the Einstein Reply Recommendations Setup page.

You can select one or more replies to publish at a time. If you publish a single reply, you can edit the reply text during publishing. If you publish multiple replies at once, you can edit each reply's text on the quick text page after publishing is complete. Replies aren't recommended to support agents until you activate your reply recommendation model.

When a reply is published, a corresponding QuickText record is created. During publishing, select a quick text folder to add the replies to and make sure that agents have access to the folder. To edit a reply after it is published, edit the related quick text record.

Einstein generates the list of replies only once, when your model finishes building. It's not possible to generate a new list.

Report

Represents a report, a set of data that meets certain criteria, displayed in an organized way. Access is read-only. This object is available in API version 20.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`, `search()`

Fields

Field	Details
Description	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The description of the report. Limit: 255 characters.

Field	Details
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** Required. The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is **Report Unique Name**. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`FolderName`	**Type** string **Properties** Filter, Nillable, Sort **Description** Name of the folder that contains the report. Available in API version 35.0 and later.
`Format`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Required. Indicates the format of the report. This field is available in API version 29.0 and later. Can have one of these values: • **Tabular** for reports in that format. In the application, the label is `Tabular`. • **Summary** for reports in that format. In the application, the label is `Summary`. • **Matrix** for reports in that format. In the application, the label is `Matrix`. • **Multiblock** for reports in joined format. In the application, the label is `Joined`.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.

Field	Details
LastReferencedDate	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
LastRunDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Returns the date the report was last run. Label is **Last Run**.
LastViewedDate	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (LastReferencedDate) but not viewed it.
Name	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** Required. The report label used in the user interface.
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values.

Field	Details
	• In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix. This field can't be accessed unless the logged-in user has the Customize Application permission.
`OwnerId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the folder that contains the report. There are 2 special folders: • Private, where the ID is the user ID • Public, where the ID is the org ID

Supported Query Scopes

Use these scopes to help specify the data your SOQL query returns.

allPrivate
Records saved in all users' private folders.

Requires the user permission "Manage All Private Reports and Dashboards" and Enhanced Analytics Folder Sharing. If your organization was created after the Summer '13 release, you already have Enhanced Analytics Folder Sharing. Available in API version 36.0 and later.

created
Records created by the user running the query.

everything
All records except records saved in other users' private folders.

mine
Records saved in the private folder of the user running the query.

organizationOwned
Records saved in Unfiled Public Reports. In Lightning Experience, the Unfiled Public Reports folder is called Public Reports.

Usage

Use the report object to get report metadata. Query, search, or retrieve specific metadata on reports. Report object fields are read-only.

Example: Reports with “Sales” in Their Name

This SOQL query returns reports that contain the name “Sales” and lists their developer names, format, ID, and report name.

```
SELECT DeveloperName,Format,Id,Name FROM Report WHERE Name LIKE '%Sales%'
```

Example: Reports in an Inactive User’s Private Folder

This SOQL query returns reports saved in a specific user’s private folder.

```
SELECT Id FROM Report USING SCOPE allPrivate WHERE OwnerId = ‘005A0000000Bc2deFG’
```

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ReportFeed
Feed tracking is available for the object.

SEE ALSO:
ReportTag
Dashboard

ReportTag

Associates a word or short phrase with a Report. This object is available in API version 20.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ItemId`	**Type** reference **Properties** Create, Filter **Description** ID of the tagged item.
`Name`	**Type** string

Field Name	Details
	Properties Create, Filter **Description** Name of the tag. If this value does not already exist, a new TagDefinition is created and becomes the parent of this Tag object. Otherwise, a TagDefinition with the same name becomes the parent of this Tag object. Parent relationships are created automatically.
`TagDefinitionId`	**Type** reference **Properties** Filter **Description** ID of the parent TagDefinition object that owns the tag.
`Type`	**Type** picklist **Properties** Create, Filter, Restricted picklist **Description** Defines the visibility of a tag. Valid values: • `Public`—The tag can be viewed and manipulated by all users in an organization. • `Personal`—The tag can be viewed or manipulated only by a user with a matching `OwnerId`.

Usage

ReportTag stores the relationship between its parent TagDefinition and the Report being tagged. Tag objects act as metadata, allowing users to describe and organize their data.

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

SEE ALSO:

Report

ReputationLevel

Represents a reputation level defined for an Experience Cloud site. This object is available in API version 32.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

This object is available only if digital experiences is enabled in your org. Only users with permissions to create or manage an Experience Cloud site can view the ReputationPointsRule records.

Fields

Field Name	Details
`Label`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The label for the reputation level.
`LevelNumber`	**Type** int **Properties** Filter, Group, Sort **Description** The rank of the reputation level.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the parent Experience Cloud site the reputation level applies to.
`Threshold`	**Type** double **Properties** Filter, Sort **Description** The lower limit of reputation points associated with this reputation level. The maximum number of reputation points a user can accrue is 999,999,999,999,999.

ReputationLevelLocalization

Represents the translated value of a reputation level. Reputation level localization only applies for reputation levels in Experience Cloud sites. This object is available in API version 35.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

This object is available only if digital experiences is enabled in your org and reputation is enabled in your Experience Cloud site.

Fields

<table>
<tr><th>Field Name</th><th>Details</th></tr>
<tr><td><code>Language</code></td><td>
Type
picklist
Properties
Create, Filter, Group, Restricted picklist, Sort
Description
The language the reputation level is translated into. The picklist contains the following fully-supported languages:

Chinese (Simplified): <code>zh_CN</code>
Chinese (Traditional): <code>zh_TW</code>
Danish: <code>da</code>
Dutch: <code>nl_NL</code>
English: <code>en_US</code>
Finnish: <code>fi</code>
French: <code>fr</code>
German: <code>de</code>
Italian: <code>it</code>
Japanese: <code>ja</code>
Korean: <code>ko</code>
Norwegian: <code>no</code>
Portuguese (Brazil): <code>pt_BR</code>
Russian: <code>ru</code>
Spanish: <code>es</code>
Spanish (Mexico): <code>es_MX</code> Spanish (Mexico) defaults to Spanish for customer-defined translations.

</td></tr>
</table>

Field Name	Details
	- Swedish: `sv` - Thai: `th` The Salesforce user interface is fully translated to Thai, but Help is in English.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values. - In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. - In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the reputation level this translated value applies to.
`Value`	**Type** string **Properties** Create, Filter, Sort, Update **Description** The translated text for the reputation level. Label is **Translation Text**.

ReputationPointsRule

Represents the reputation point rules for an Experience Cloud site. Each rule specifies an action that members can earn points from and the points associated with those actions in a particular site. This object is available in API version 32.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

This object is available only if digital experiences is enabled in your org. Only users with permissions to create or manage an Experience Cloud site can view the ReputationPointsRule records.

Fields

Field Name	Details
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the parent Experience Cloud site that the point rule applies to.
`Points`	**Type** int **Properties** Filter, Group, Sort **Description** The reputation points associated with the member action this rule is for. The maximum value this field can contain is 999,999.
`Type`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The member action associated with this rule, limited to one of these actions: • Write a post (`FeedItemWriteAPost`) • Write a comment (`FeedItemWriteAComment`) • Receive a comment (`FeedItemReceiveAComment`) • Like something (`FeedItemLikeSomething`) • Receive a like (`FeedItemReceiveALike`) • Share a post (`FeedItemShareAPost`) • Someone shares your post (`FeedItemSomeoneSharesYourPost`) • Mention someone (`FeedItemMentionSomeone`) • Receive a mention (`FeedItemReceiveAMention`)

Field Name	Details
	• Ask a question (`FeedItemPostQuestion`) • Answer a question (`FeedItemAnswerAQuestion`) • Receive an answer (`FeedItemReceiveAnAnswer`) • Mark an answer as best (`FeedItemMarkAnswerAsBest`) • Someone marks your answer as best (`FeedItemYourAnswerMarkedBest`) • Endorse someone for knowledge on a topic (`EndorseSomeoneForKnowledgeOnATopic`) • Someone endorses you for knowledge on a topic (`EndorsedForKnowledgeOnATopic`) • Upload a profile picture (`ProfilePhotoUpload`) This action is available in API version 45.0 and later.

ResourceAbsence

Represents a time period in which a service resource is unavailable to work in Field Service and Lightning Scheduler. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
`AbsenceNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** (Read only) An auto-generated number identifying the absence.
`Address`	**Type** address

Field Name	Details
	Properties Filter **Description** The compound form of the address associated with the absence.
City	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The city of the address associated with the absence. Maximum length is 40 characters.
Country	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The country of the address associated with the absence. Maximum length is 80 characters.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** The description of the absence.
End	**Type** dateTime **Properties** Create, Filter, Sort, Update **Description** The date and time when the absence ends.
GeocodeAccuracy	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update

Field Name	Details
	Description The level of accuracy of a location's geographical coordinates compared with its physical address. Usually provided by a geocoding service based on the address's latitude and longitude coordinates. Note: This field is available in the API only.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the resource absence was last modified. Its label in the user interface is `Last Modified Date`.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the resource absence was last viewed.
`Latitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `Longitude` to specify the precise geolocation of the address associated with the absence. Acceptable values are numbers between –90 and 90 with up to 15 decimal places. Note: This field is available in the API only.
`Longitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `Latitude` to specify the precise geolocation of the address associated with the absence. Acceptable values are numbers between –180 and 180 with up to 15 decimal places. Note: This field is available in the API only.

Field Name	Details
Postal Code	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The postal code of the address associated with the absence. Maximum length is 20 characters.
ResourceId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The absent service resource.
Start	**Type** dateTime **Properties** Create, Filter, Sort, Update **Description** The date and time when the absence begins.
State	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The state of the address associated with the absence. Maximum length is 80 characters.
Street	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street number and name of the address associated with the absence.
Type	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field Name	Details
	Description The type of absence: *Meeting*, *Training*, *Medical*, or *Vacation*. The default value is *Vacation*. You can add custom values if needed, but the name *Break* is reserved for the managed package.

Usage

Resource absences you define periods of time when a service resource is unavailable to work. Unless you're using the Field Service managed package, service resources can still be assigned to appointments that conflict with their absences.

Tip: Create a trigger that sends an approval request to a supervisor when a service resource creates an absence.

If you're not using the Field Service managed package, a calendar view isn't available for individual service resources.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ResourceAbsenceFeed
Feed tracking is available for the object.

ResourceAbsenceHistory
History is available for tracked fields of the object.

ResourcePreference

Represents an account's preference for a specified service resource on field service work.

Resource preferences indicate which service resources should be assigned to field service work. You can designate service resources as preferred, required, or excluded on specific accounts or work orders. Work orders inherit their associated account's resource preferences.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the resource preference was last modified.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the resource preference was last viewed.
PreferenceType	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Resource preference type. Values include: • Preferred: Indicates that the customer would like their field service work assigned to the resource • Required: Indicates that the resource must be assigned to the customer's field service work • Excluded: Indicates that the customer does not want their field service work assigned to the resource Resource preferences serve more as a suggestion than a requirement. You can still assign a service appointment to any resource regardless of the related work order's resource preferences.
RelatedRecordId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The work order or account with the resource preference.
ResourcePreferenceNumber	**Type** string

Field Name	Details
	Properties Autonumber, Defaulted on create, Filter, Sort **Description** An auto-generated number identifying the resource preference.
`ServiceResourceId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The service resource that is preferred, required, or excluded.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ResourcePreferenceFeed
Feed tracking is available for the object.

ResourcePreferenceHistory
History is available for tracked fields of the object.

ReturnOrder

Represents the return or repair of inventory or products in Field Service, or the return of order products in Order Management. This object is available in API version 42.0 and later.

Return orders are available in Lightning Experience, Salesforce Classic, the Salesforce mobile app, the Field Service mobile app for Android and iOS, and communities built using Salesforce Tabs + Visualforce.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service or Order Management must be enabled.

Fields

Field Name	Details
AccountId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The account associated with the return order.
CaseId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The case associated with the return order.
ContactId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The contact associated with the return order.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** Notes or context about the return order.
DestinationLocationId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The location where the items are being returned to. For example, if the return order tracks the return of products from a technician’s van to a warehouse, the warehouse is the destination location.
ExpectedArrivalDate	**Type** dateTime

Field Name	Details
	Properties Create, Filter, Nillable, Sort, Update **Description** The date when the items are expected to arrive at the destination location.
ExpirationDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Authorizations can’t be captured after their expiration dates. This field is available in API version 50.0 and later.
GrandTotalAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total, including adjustments and tax, of the products and delivery charges on the return order. This includes all return order line items associated with the return order. This amount is equal to TotalAmount + TotalTaxAmount. This is a calculated field. This field is available in API version 50.0 and later.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the return order was last modified. Its label in the user interface is `Last Modified Date`.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the return order was last viewed.
LifeCycleType	**Type** picklist

Field Name	Details
	Properties Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether the order summary is managed by Salesforce Order Management (MANAGED) or by an external system (UNMANAGED). An unmanaged order summary is stored in Salesforce for reference purposes. • Some Order Management APIs reject input records that are associated with unmanaged order summaries. • Order Management does not update financial bucket fields on some records that are associated with unmanaged order summaries. • A user with the EditUnmanagedOrderSummaries or B2BCommerceIntegrator permission can edit certain fields on objects related to unmanaged order summaries that are normally only accessible via APIs. Possible values are: • `MANAGED`—Managed • `UNMANAGED`—Unmanaged This field is available in API version 50.0 and later.
`OrderId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The order associated with the return order. When you associated a return order with an order, you can associate the return order's line items with order products.
`OrderSummaryId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the order summary associated with the return order. This field is available in API version 50.0 and later.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The owner of the return order.

Field Name	Details
ProductRequestId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The product request associated with the return order. When you associated a return order with a product request, you can associate the return order's line items with the product request's line items. A return order might be related to a product request if the return order tracks the return of unused products or products to be repaired or replaced. For example, a technician creates a product request for three motors to prepare for a field visit. If the technician finds that only two motors are needed, they can create a return order to return the third to the original location, and list the product request in this field.
ProductServiceCampaignId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The product service campaign associated with the return order
ReturnOrderNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** (Read only) Auto-generated number identifying the return order.
ReturnedById	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the user returning the items.
ShipFromAddress	**Type** address **Properties** Filter, Nillable

Field Name	Details
	Description The return shipping address. This address tracks the location of the items at the start of the return or repair. For example, if a customer is returning an item, the Ship From address is the customer's address.
ShipFromCity	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The city of the return shipping address. This address tracks the location of the items at the start of the return or repair. For example, if a customer is returning an item, the Ship From address is the customer's address.
ShipFromCountry	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The country of the return shipping address. This address tracks the location of the items at the start of the return or repair. For example, if a customer is returning an item, the Ship From address is the customer's address.
ShipFromGeocodeAccuracy	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Accuracy level of the geocode for the return shipping address. See Compound Field Considerations and Limitations for details on geolocation compound fields. Note: This field is available in the API only.
ShipFromLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with Longitude to specify the precise geolocation of the return shipping address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields.

Field Name	Details
	Note: This field is available in the API only.
ShipFromLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with Latitude to specify the precise geolocation of the return shipping address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields. **Note:** This field is available in the API only.
ShipFromPostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The postal code of the return shipping address. This address tracks the location of the items at the start of the return or repair. For example, if a customer is returning an item, the Ship From address is the customer's address.
ShipFromState	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The state of the return shipping address. This address tracks the location of the items at the start of the return or repair. For example, if a customer is returning an item, the Ship From address is the customer's address.
ShipFromStreet	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street of the return shipping address. This address tracks the location of the items at the start of the return or repair. For example, if a customer is returning an item, the Ship From address is the customer's address.
ShipmentType	**Type** picklist

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The type of shipment associated with the return order. Available values are: • Standard (default value) • Rush • Overnight • Next Business Day • Pickup
SourceLocationId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The items' location at the start of the return or repair. For example, if the return order tracks the return of products from a technician's service vehicle to a warehouse, the service vehicle is the source location.
Status	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The status of the return order. Available values are: • Draft • Submitted • Approved • Canceled • Closed
StatusCategory	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Status category of the return order. Processing of the return order depends on this value. Each status category corresponds to one or more statuses. Possible values are: • `Activated`

Field Name	Details
	• `Canceled` • `Closed` • `Draft` This field is available in API version 50.0 and later.
`TaxLocaleType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The system used to handle tax on the original order associated with the return order. Gross usually applies to taxes like value-added tax (VAT), and Net usually applies to taxes like sales tax. Possible values are: • `Gross` (displays most prices and taxes as combined values) • `Net` (displays most prices and taxes as separate values) This field is available in API version 50.0 and later.
`TotalAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Adjusted total, not including tax, of the return order line items, including products and delivery charges, on the ReturnOrder. This is a calculated field. This field is available in API version 50.0 and later.
`TotalDeliveryAdjustAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of the price adjustments applied to the delivery charges on the return order. This value only includes adjustments to return order line items of type code Charge. This is a calculated field. This field is available in API version 50.0 and later.
`TotalDeliveryAdjustAmtWithTax`	**Type** currency

Field Name	Details
	Properties Filter, Nillable, Sort **Description** Total amount of the price adjustments applied to the delivery charges on the return order, inclusive of tax. This value only includes adjustments to return order line items of type code Charge. This amount is equal to TotalDeliveryAdjustAmount + TotalDeliveryAdjustTaxAmount. This is a calculated field. This field is available in API version 50.0 and later.
`TotalDeliveryAdjustTaxAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Tax on the TotalDeliveryAdjustmentAmount. This is a calculated field. This field is available in API version 50.0 and later.
`TotalDeliveryAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total of the delivery charges on the return order. This value only includes return order line items of type code Charge. This is a calculated field. This field is available in API version 50.0 and later.
`TotalDeliveryAmtWithTax`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of the delivery charges on the return order, inclusive of tax. This value only includes return order line items of type code Charge. This amount is equal to TotalDeliveryAmount + TotalDeliveryTaxAmount. This is a calculated field. This field is available in API version 50.0 and later.

Field Name	Details
TotalDeliveryTaxAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Tax on the TotalDeliveryAmount. This is a calculated field. This field is available in API version 50.0 and later.
TotalProductAdjustAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of the price adjustments applied to the products on the return order. This value only includes adjustments to return order line items of type code Product. This is a calculated field. This field is available in API version 50.0 and later.
TotalProductAdjustAmtWithTax	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of the price adjustments applied to the products on the return order, inclusive of tax. This value only includes adjustments to return order line items of type code Product. This amount is equal to TotalProductAdjustAmount + TotalProductAdjustTaxAmount. This is a calculated field. This field is available in API version 50.0 and later.
TotalProductAdjustTaxAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Tax on the TotalProductAdjustmentAmount. This is a calculated field. This field is available in API version 50.0 and later.

Field Name	Details
TotalProductAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total of the product charges on the return order. This value only includes return order line items of type code Product. This is a calculated field. This field is available in API version 50.0 and later.
TotalProductAmtWithTax	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of the product charges on the return order, inclusive of tax. This value only includes return order line items of type code Product. This amount is equal to TotalProductAmount + TotalProductTaxAmount. This is a calculated field. This field is available in API version 50.0 and later.
TotalProductTaxAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Tax on the TotalProductAmount. This is a calculated field. This field is available in API version 50.0 and later.
TotalTaxAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Tax on the TotalAmount. This is a calculated field. This field is available in API version 50.0 and later.

Usage

You can use return orders to track customer returns, customer repairs, or the return of inventory from a technician's van stock to a warehouse or supplier. Customers can initiate a return from a community, or agents can create return orders in response to a customer call or technician request.

Return orders are composed of return order line items, which allow you to add details about the items being returned. To represent the returned items, each line item must list one or more of the following: product, product item, asset, product request line item, and order product. Return orders can be associated with a product request, case, account, contact, and order if needed. This versatility lets you use return orders to track a wide range of return scenarios.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ReturnOrderFeed
Feed tracking is available for the object.

ReturnOrderHistory
History is available for tracked fields of the object.

ReturnOrderOwnerSharingRule
Sharing rules are available for the object.

ReturnOrderShare
Sharing is available for the object.

ReturnOrderItemAdjustment

Represents a price adjustment on a return order line item. This object is available in API version 50.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Order Management must be enabled.

Fields

Field	Details
`Amount`	**Type** currency **Properties** Create, Filter, Sort

Field	Details
	Description Amount, not including tax, of the adjustment.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of the adjustment.
OrderItemAdjustLineSummaryId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the order item adjustment line summary associated with the adjustment.
ReturnOrderId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the return order associated with the return order line item to which the adjustment applies.
ReturnOrderItemAdjustmentNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** ID of the return order item adjustment.
ReturnOrderLineItemId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the return order line item to which this adjustment applies.
TotalAmtWithTax	**Type** currency

Field	Details
	Properties Filter, Nillable, Sort **Description** Total amount of the adjustment, inclusive of tax. This amount is equal to Amount + TotalTaxAmount.
`TotalTaxAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Tax on the Amount.

ReturnOrderItemTax

Represents the tax on a return order line item or return order item adjustment. This object is available in API version 50.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Order Management must be enabled.

Fields

Field	Details
`Amount`	**Type** currency **Properties** Create, Filter, Sort **Description** Amount of tax represented by the return order item tax.
`Description`	**Type** textarea

Field	Details
	Properties Create, Nillable, Update **Description** Description of the return order item tax.
OrderItemTaxLineItemSummaryId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the order item tax line item summary associated with the order item summary that corresponds to the return order line item to which the tax applies.
Rate	**Type** percent **Properties** Filter, Nillable, Sort **Description** Tax rate used to calculate the Amount.
ReturnOrderId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the associated return order.
ReturnOrderItemAdjustmentId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** If this object represents a tax on an adjustment, this value is the ID of the return order item adjustment to which the tax applies. If this value is null, the adjustment applies to a return order line item.
ReturnOrderItemTaxNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** ID of the return order item tax.

Field	Details
ReturnOrderLineItemId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** If this object represents a tax on a return order line item, this value is the ID of that return order line item. If this object represents a tax on an adjustment, this value is the ID of the return order line item to which the adjustment applies.
TaxEffectiveDate	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Date on which the Amount was calculated. Important due to tax rate changes over time.
Type	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Shows whether the amount on the tax line is an estimate or the final calculated amount. Doesn't set a value by default. Users can define automation to set and change the value as needed. Possible values are: • `Actual` • `Estimated`

ReturnOrderLineItem

Represents a specific product that is returned or repaired as part of a return order in Field service, or a specific order item that is returned as part of a return order in Order Management. This object is available in API version 42.0 and later.

Return orders are available in Lightning Experience, Salesforce Classic, the Salesforce mobile app, the Field Service mobile app for Android and iOS, and communities built using Salesforce Tabs + Visualforce.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service or Order Management must be enabled.

Fields

Field Name	Details
AssetId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The asset associated with the return order line item. One or more of the following fields must be filled out: AssetId, OrderItemId, Product2Id, ProductItemId, and ProductRequestLineItemId.
ChangeOrderItemId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the change order item associated with the return order line item. This field is available in API version 50.0 and later.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** Notes or context about the return order line item.
DestinationLocationId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The location where the items are being returned to. For example, if the return order tracks the return of products from a technician's van to a warehouse, the warehouse is the destination location.
GrossUnitPrice	**Type** currency

Field Name	Details
	Properties Create, Filter, Nillable, Sort, Update **Description** Unit price, including tax, of the product represented by the associated order item summary. This field is available in API version 50.0 and later.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the return order line item was last modified. Its label in the user interface is `Last Modified Date`.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the return order line item was last viewed.
`OrderItemId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The order product associated with the return order line item. One or more of the following fields must be filled out: AssetId, OrderItemId, Product2Id, ProductItemId, and ProductRequestLineItemId.
`OrderItemSummaryId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the order item summary associated with the return order line item. This field is available in API version 50.0 and later.
`ProcessingPlan`	**Type** picklist

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** Indicates the preferred fate of the items following their return. Available values are: • `Repair`—Repair the items and return them to the owner • `Discard`—Discard the items • `Salvage`—Salvage the items' working parts • `Restock`—Return the items to your inventory
`Product2Id`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The product associated with the return order line item. One or more of the following fields must be filled out: AssetId, OrderItemId, Product2Id, ProductItemId, and ProductRequestLineItemId.
`ProductItemId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The product item representing the location of the product at the start of the return. One or more of the following fields must be filled out: AssetId, OrderItemId, Product2Id, ProductItemId, and ProductRequestLineItemId.
`ProductRequestLineItemId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The product request line item associated with the return order line item. One or more of the following fields must be filled out: AssetId, OrderItemId, Product2Id, ProductItemId, and ProductRequestLineItemId.
`ProductServiceCampaignId`	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The product service campaign associated with the return order line item.
ProductServiceCampaignItemId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The product service campaign item associated with the return order line item.
QuantityExpected	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The quantity of items expected to be returned. This field is available in API version 50.0 and later.
QuantityReceived	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The actual quantity of items received for return. This field is available in API version 50.0 and later.
QuantityRejected	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The quantity of items rejected for return. This field is available in API version 50.0 and later.
QuantityReturned	**Type** double **Properties** Create, Filter, Sort, Update **Description** The quantity of items being returned. If multiple types of products are being returned, track each product in a different return order line item.

Field Name	Details
QuantityUnitOfMeasure	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Units of the returned items; for example, kilograms or liters. Quantity Unit of Measure picklist values are inherited from the Quantity Unit of Measure field on products.
ReasonForRejection	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** Reason for rejecting returned items on this return order line item. Possible values are: • `Damaged Item` • `Expired Warranty` • `Missing Item or Part` • `Wrong Item` This field is available in API version 50.0 and later.
ReasonForReturn	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The reason the items are being returned. Available values are: • `Damaged` • `Defective` • `Duplicate Order` • `Wrong Item` • `Wrong Quantity` • `Not Satisfied` • `Outdated` • `Other`
RepaymentMethod	**Type** picklist

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The method by which the customer or owner will be reimbursed for the items being returned. Available values are: • `Replace`—The items will be replaced • `Refund`—The items will be returned and the owner will be refunded • `Credit`—The items will be returned and the owner will receive credit for them • `Return`—The items will be returned to the owner (for example, following their repair)
`ReturnOrderId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The return order that the return order line item belongs to.
`ReturnOrderLineItemNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** (Read only) Auto-generated number that identifies the return order line item.
`SourceLocationId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The items' location at the start of the return or repair. For example, if the return order tracks the return of products from a technician's service vehicle to a warehouse, the service vehicle is the source location.
`TotalAdjustmentAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total of all price adjustments applied to the return order line item.

Field Name	Details
	This is a calculated field. This field is available in API version 50.0 and later.
TotalAdjustmentAmountWithTax	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of the price adjustments applied to the return order line item, inclusive of tax. This amount is equal to TotalAdjustmentAmount + TotalAdjustmentTaxAmount. This is a calculated field. This field is available in API version 50.0 and later.
TotalAdjustmentTaxAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Tax on the TotalAdjustmentAmount. This is a calculated field. This field is available in API version 50.0 and later.
TotalAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total, including adjustments and tax, of the return order line item. This is a calculated field. This field is available in API version 50.0 and later.
TotalLineAmount	**Type** currency **Properties** Create, Defaulted on create, Filter, Nillable, Sort, Update **Description** Total, not including adjustments or tax, of the return order line item. This field is available in API version 50.0 and later.

Field Name	Details
TotalLineAmountWithTax	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total price of the return order line item, inclusive of tax. This amount is equal to TotalLineAmount + TotalLineTaxAmount. This is a calculated field. This field is available in API version 50.0 and later.
TotalLineTaxAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Tax on the TotalLineAmount. This is a calculated field. This field is available in API version 50.0 and later.
TotalPrice	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total, including adjustments but not tax, of the return order line item. Equal to UnitPrice times Quantity. This is a calculated field.
TotalTaxAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Tax on the TotalAmount. This is a calculated field. This field is available in API version 50.0 and later.
Type	**Type** picklist

Field Name	Details
	Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Type of the return order line item. Matches the type of the associated order item summary. Delivery Charge indicates that the return order line item represents a delivery charge. Order Product indicates that it represents any other type of product, service, or charge. Each type corresponds to one type code. Possible values are: • `Delivery Charge` • `Order Product` This field is available in API version 50.0 and later.
`TypeCode`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Type code of the return order line item. Matches the type code of the associated order item summary. Processing depends on this value. Charge indicates that the return order line item represents a delivery charge. Product indicates that it represents an other type of product, service, or charge. Each type category corresponds to one or more types. Possible values are: • `Charge` • `Product` This field is available in API version 50.0 and later.
`UnitPrice`	**Type** currency **Properties** Create, Defaulted on create, Filter, Nillable, Sort, Update **Description** Unit price of the return order line item. This field is available in API version 50.0 and later.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ReturnOrderLineItemFeed
Feed tracking is available for the object.

ReturnOrderLineItemHistory
History is available for tracked fields of the object.

ReturnOrderOwnerSharingRule

Represents the rules for sharing a return order with user records other than the owner or anyone above the owner in the role hierarchy. This object is available in API version 42.0 and later.

Note: To enable access to this object for your org, contact Salesforce customer support. However, we recommend that you instead use Metadata API to programmatically update owner sharing rules because it triggers automatic sharing rule recalculation. The SharingRules Metadata API type is enabled for all orgs.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service must be enabled.

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface.

Field	Details
	Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group. A return order owned by a User in the source Group triggers the rule to give access.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.
`ServiceResourceAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of access granted to the target Group, or UserRole. The possible values are: • `Read` • `Edit` • `All`
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the User or Group being granted access.

RuleTerritory2Association

Represents a record-assignment rule and its association to an object, such as Account. Available only if Enterprise Territory Management has been enabled for your organization.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

As of Summer '20 and later, only standard users can access this object. If a territory model is in `Active` state, any standard user can view that model, including its territories and assignment rules. For territories in an active model, any standard user can view assigned records and assigned users subject to your organization's sharing settings. Users cannot view territory models in other states (such as `Planning` or `Archived`).

Fields

Field Name	Details
`IsInherited`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Indicates whether the rule is an *inherited* rule (`true`) or a *local* rule (`false`). Rule inheritance flows from the parent territory where the rule is created to the rule's descendent territories (if any) in the territory model hierarchy. A local rule is created within a single territory and affects that territory only.
`RuleId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the rule.
`Territory2Id`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the territory where the rule was created.

SalesAIScoreCycle

Represents the cycle type and ID used to score records. This object is available in API version 47.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

To see score cycle information, users need a Sales Cloud Einstein license with the View Scoring Model Factors permission enabled. The permission isn't enabled by default. As of the Spring '20 release, Pardot and High Velocity Sales users no longer have access to this object.

Fields

Field	Details
`CycleType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The cycle used to create scores on opportunity records can be one of two types. • `OpportunityScoreModeling`—Provides model factors, which Sales Cloud Einstein uses to build a scoring model. • `OpportunityScoreScoring`—Provides scores and key factors to individual records, which are based on Sales Cloud Einstein's scoring model. Note: When the value `OpportunityScoreModeling` is returned, use the Sales AI Score Model Factor object to get information about the model factors.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The ID of the cycle. Currently, the name is a system-generated unique value.

SalesAIScoreModelFactor

Represents the factors that Sales Cloud Einstein uses to build a scoring model. Scoring models are used by features, such as Opportunity Scoring, to score individual records. This object is available in API version 47.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

To see model factor information, users need a Sales Cloud Einstein license with the "View Scoring Model Factors" permission enabled. The permission isn't enabled by default. As of the Spring '20 release, Pardot and High Velocity Sales users no longer have access to this object.

Fields

Field	Details
`Factor`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** A factor that contributes to a scoring model. For example, a factor could indicate that an amount increase has a positive effect on an opportunity score (AmountIncreasePositive). Or, it could indicate that a change to the close date has a negative effect on an opportunity score (CloseDateChangeNegative).
`FactorSummaryOrgLanguage`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Describes the factor in English. For example, the factor field value AmountChangePositive is summarized as "Amount change has positive effect".
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The ID of the model factor. Currently, the name is a system-generated value.
`OperatorType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort

Field	Details
	Description The operator used to analyze field values. For example, the factor HighSuccessLeadSource uses the Lead Source field as the primary source field. When building the scoring model, Einstein uses the Equals operator to determine `PrimarySourceFieldValue = Internet`. The other supported operator is `IsNull`.
`PrimarySourceFieldName`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the primary field used in the model factor. For example, the factor HighSuccessIndustry uses the account's Industry as the primary field.
`PrimarySourceFieldValue`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Information used to retrieve the PrimarySourceFieldValueText, such as a record ID or value.
`PrimarySourceFieldValueText`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The value of the primary source field used in the model factor. For example, the factor HighSuccessIndustry uses the account's Industry as the primary field, and the value of the Industry field is manufacturing. Note: This field's value is retrieved from the `PrimarySourceFieldValue` field. If the `PrimarySourceFieldValue` field is a record ID, then `PrimarySourceFieldValueText` returns the name of the record. If `OperatorType` returns `isNull`, then `PrimarySourceFieldValue` returns `true` and `PrimarySourceFieldValueText` returns `null`.
`SalesAiScoreCycleId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the score cycle used to generate model factors. Each score cycle can have multiple model factors associated to it.

Field	Details
ScoreCorrelation	**Type** double **Properties** Filter, Nillable, Sort **Description** The strength between a model factor and a score. If score correlation value is closer to `+1`, it's more likely that the model factor contributing toward a high score. If score correlation value is closer to `-1`, it's more likely that the model factor is contributing toward a low score.
SecondarySourceFieldName	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The name of the secondary field used in the model factor. For example, the factor HighAmountActivity uses Task as the primary field and Event as the secondary field. Not all model factors use a secondary source field.
SecondarySourceFieldValue	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Information used to retrieve the SecondarySourceFieldValueText, such as a record ID or value. Not all model factors use a secondary source field. This field is available in API version 50.0 and later.
SecondarySourceFieldValueText	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** When the model factor is based on two source fields, this field represents the value of the secondary source field. For example, the factor HighSuccessMultipleSameFieldValue might use the opportunity's related product as the primary field and pricebook as the secondary field. The product and pricebook names are indicated by the PrimarySourceFieldValueText and SecondarySourceFieldValueText, respectively. Not all model factors use a secondary source field. This field is available in API version 50.0 and later. Note: This field's value is retrieved from the `SecondarySourceFieldValue` field. If the `SecondarySourceFieldValue` field is a record ID, then `SecondarySourceFieldValueText` returns the name of the record. If `OperatorType` returns `isNull`, then `SecondarySourceFieldValue` returns `true` and `SecondarySourceFieldValueText` returns `null`.

Field	Details
`Status`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Determines whether the model factor is active or inactive.

Usage

Use the SalesAIScoreModelFactor object to run a query that retrieves the latest highest influencing model factors.

```
SELECT Id,Factor,ScoreCorrelation,FactorSummaryOrgLanguage
FROM SalesAIScoreModelFactor
WHERE Status='Active' and SalesAIScoreCycle.CycleType='OpportunityScoreModeling'
ORDER BY ScoreCorrelation desc
```

SalesChannel

Represents the origin of an order. For example, a web storefront, physical store, marketplace, or mobile app. Usually you will set up a SalesChannel for each Site in your B2C Commerce implementation. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is only available in Salesforce Order Management orgs.

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of the SalesChannel.

Field	Details
ExternalChannelNumber	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** External system identifier for the SalesChannel.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. A null value can mean that this record has only been referenced (LastReferencedDate) and not viewed.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the user who currently owns this SalesChannel. Default value is the user logged in to the API to perform the create.
SalesChannelName	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Name of the SalesChannel.

SEE ALSO:

Order

OrderSummary

SalesStoreCatalog

Represents the catalog associated with a store. This object is available in API version 49.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

You must have the B2B Commerce license and a CMS workspace to access a store.

Fields

Field	Details
`CurrencyIsoCode`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The default value is `USD`. Possible values are: • `USD`—U.S. Dollar
`ImplementorType`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The type of implementor. WebStoreCatalog is the only available implementor type for SalesStoreCatalog.
`ProductCatalogId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID that references the product catalog.
`SalesStoreId`	**Type** reference **Properties** Filter, Group, Sort

Field	Details
	Description The ID that references the store.

SalesWorkQueueSettings

Represents settings used to customize work queue options for third-party scoring. Third-party scoring enables custom number fields on person accounts, contacts, and leads. You must be a High Velocity Sales customer to update this object. Previously, you could only use the Einstein Intelligence Score for third-party scoring. Available starting in Version 47.0.

Note: This object can't be packaged.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`FeatureName`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** A value that represents the name of the work queue settings. To use custom number fields in the work queue, the value must be entered as `ThirdPartyScore`.
`TargetEntity`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The related record object of the custom number field. Acceptable SObjects include PersonAccount, Contact, and Lead.
`TargetField`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update

Field	Details
	Description A value that represents the DeveloperName of the custom number field related to the TargetEntity. Custom fields must have a custom number data type. • To use Einstein Intelligence Score for lead scoring, enter `ScoreIntelligence.Score` for the DeveloperName. • To remove custom number fields from the work queue, enter `None`.

SamlSsoConfig

Represents a SAML Single Sign-On configuration. This object is available in API version 32.0 and later.

Single sign-on is a process that allows network users to access all authorized network resources without having to log in separately to each resource. Single sign-on allows you to validate usernames and passwords against your corporate user database or other client application rather than having separate user passwords managed by Salesforce.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

As of Summer '20 and later, only users with the View Setup and Configuration permission or both the Customize Application and Modify All Data permissions can access this object.

Fields

Field Name	Details
`AttributeFormat`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** For SAML 2.0 only and when `identityLocation` is set to `Attribute`. Possible values include `unspecified`, `emailAddress`, or `persistent`. All legal values can be found in the "Name Identifier Format Identifiers" section of the Assertions and Protocols SAML 2.0 specification.
`AttributeName`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The name of the identity provider's application. Get this name value from your identity provider.
Audience	**Type** string **Properties** Filter, Group, Sort **Description** The Issuer, also called the "Entity ID." The value is a URL that uniquely identifies the SAML identity provider.
DeveloperName	**Type** string **Properties** Filter, Group, Sort **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package, and the changes are reflected in a subscriber's organization.
ErrorUrl	**Type** string **Properties** Filter, Nillable, Sort **Description** When there's an error during login, specify the URL of the page where users are directed. It must be publicly accessible, such as a public site Visualforce page. The URL can be absolute or relative.
ExecutionUserID	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The user that runs the Apex handler class. The user must have the "Manage Users" permission. A user is required if you specify a SAML JIT handler class.

Field Name	Details
IdentityLocation	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The location in the assertion where a user is identified. Valid values are: • SubjectNameId—The identity is in the <Subject> statement of the assertion. • Attribute—The identity is specified in an <AttributeValue>, located in the <Attribute> of the assertion.
IdentityMapping	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The identifier that the service provider uses for the user during Just-in-Time user provisioning. Valid values are: • Username—The user's Salesforce username. • FederationId—The federation ID from the user object; the identifier that's used by the service provider for the user. • UserId—The user ID from the user's Salesforce organization.
Issuer	**Type** string **Properties** Filter, idLookup, Group, Sort **Description** Also called the "Entity ID." The value is a URL that uniquely identifies the SAML identity provider.
Language	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language for the organization.
LoginUrl	**Type** string

Field Name	Details
	Properties Filter, Nillable, Sort **Description** For SAML 2.0 only: The URL where Salesforce sends a SAML request to start the login sequence.
`LogoutUrl`	**Type** string **Properties** Filter, Nillable, Sort **Description** For SAML 2.0 only: The URL to direct users to where they click the Logout link. The default is `http://www.salesforce.com`.
`MasterLabel`	**Type** string **Properties** Filter, Group, Sort **Description** The text that's used to identify the Visualforce page in the Setup area of Salesforce.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
`OptionsSpInitBinding`	**Type** boolean

Field Name	Details
	Properties Filter **Description** The service provider initiated request binding, either HTTP Redirect (`true`) or HTTP POST (`false`).
`OptionsUseConfigRequestMethod`	**Type** boolean **Properties** Filter **Description** If `true`, applies the selected Request Signature Method (RSM) during single logout. If `false`, the default RSM (RSA-SHA1) is applied.
`OptionsUserProvisioning`	**Type** boolean **Properties** Filter **Description** If `true`, Just-in-Time user provisioning is enabled, which creates users on the fly the first time that they try to log in. Specify `Federation ID` for the `identityMapping` value to use this feature.
`RequestSignatureMethod`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The method that's used to sign the SAML request. Valid values are: • `RSA-SHA1` • `RSA-SHA256`
`SamlJitHandlerId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The name of an existing Apex class that implements the `Auth.SamlJitHandler` interface.

Field Name	Details
SingleLogoutBinding	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Determines where to put the LogoutRequest or LogoutResponse in the SAML request during single logout (SLO). The value is base64 encoded. Valid values are: • RedirectBinding — Sent in the query string, deflated. • PostBinding — Sent in the POST body, not deflated.
SingleLogoutUrl	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The SAML single logout endpoint. This URL is the endpoint where Salesforce sends LogoutRequests (when Salesforce initiates a logout), or LogoutResponses (when the identity provider initiates a logout).
ValidationCert	**Type** string **Properties** Filter, Sort **Description** The certificate that's used to validate the request. Get this certificate value from your identity provider.
Version	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The SAML version. Valid values are: • SAML1_1 • SAML2_2

Scontrol

A custom s-control, which is custom content that is hosted by the system but executed by the client application.

Important: Visualforce pages supersede s-controls. Organizations that haven't previously used s-controls can't create them. Existing s-controls are unaffected, and can still be edited. We recommend that you move your s-controls to Visualforce. We continue to support the Scontrol object.

Represents a custom s-control, which is custom content that the system hosts, but client applications execute. An s-control can contain any type of content that you can display or run in a Web browser.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- Your organization must be using Enterprise, Developer, or Unlimited Edition and be enabled for custom s-controls.
- Customer Portal users can't access this object.

Fields

Field	Details
`Binary`	**Type** base64 **Properties** Create, Nillable, Update **Description** Binary content of this custom s-control, such as an ActiveX control or a Java archive. Can be specified when created, but not when updated. Limit: 5 MB.
`BodyLength`	**Type** int **Properties** Filter, Group, Sort **Description** The length of the custom s-control. Label is **Binary Length**.
`ContentSource`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Specifies the source of the s-control content, either custom HTML, a snippet (s-controls that are included in other s-controls), or a URL.

Field	Details
Description	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of the custom s-control.
DeveloperName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is **S-Control Name**. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
EncodingKey	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Picklist of character set encodings, including ISO-08859-1, UTF-8, EUC, JIS, Shift-JIS, Korean (ks_c_5601-1987), Simplified Chinese (GB2312), and Traditional Chinese (Big5).
Filename	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An uploaded object to display when the custom s-control is added to a custom link. Can be a Java applet, an ActiveX control, or any other type of desired content.
HtmlWrapper	**Type** textarea **Properties** Create, Update

Field	Details
	Description Required. HTML page that will be delivered when the user views this custom s-control. This HTML page can be the entire content of the custom s-control, or it can reference the binary. Limit: 1,048,576 characters. Label is **HTML Body**.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. Name of this custom s-control. Label is **Label**.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
`SupportsCaching`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the s-control supports caching (`true`) or not (`false`).

Usage

Use custom s-controls to manage custom content that extends application functionality. All users can view custom s-controls, but the "Customize Application" permission is required to create or update custom s-controls.

SEE ALSO:

Object Basics

ScontrolLocalization

The translated value of the field label for an s-control.

Important: Visualforce pages supersede s-controls. Organizations that haven't previously used s-controls can't create them. Existing s-controls are unaffected, and can still be edited.

When the Translation Workbench is enabled for your organization, provides the translation of the field label of an s-control.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- Your organization must be using Professional, Enterprise, Developer, or Unlimited Edition and be enabled for the Translation Workbench.
- To view this object, you must have the "View Setup and Configuration" permission.

Fields

Field	Details
`LanguageLocaleKey`	**Type** picklist **Properties** Create, Filter, Nillable, Restricted picklist **Description** This field is available in API version 16.0 and earlier. It is the same as the `Language` field.
`Language`	**Type** picklist

Field	Details
	Properties Create, Filter, Nillable, Restricted picklist **Description** This field is available in API version 17.0 and later. The combined language and locale ISO code, which controls the language for labels displayed in an application. This picklist contains the following fully-supported languages: • Chinese (Simplified): `zh_CN` • Chinese (Traditional): `zh_TW` • Danish: `da` • Dutch: `nl_NL` • English: `en_US` • Finnish: `fi` • French: `fr` • German: `de` • Italian: `it` • Japanese: `ja` • Korean: `ko` • Norwegian: `no` • Portuguese (Brazil): `pt_BR` • Russian: `ru` • Spanish: `es` • Spanish (Mexico): `es_MX` Spanish (Mexico) defaults to Spanish for customer-defined translations. • Swedish: `sv` • Thai: `th` The Salesforce user interface is fully translated to Thai, but Help is in English. The following end-user only languages are available. • Arabic: `ar` • Bulgarian: `bg` • Croatian: `hr` • Czech: `cs` • English (UK): `en_GB` • Greek: `el` • Hebrew: `iw` • Hungarian: `hu` • Indonesian: `in` • Polish: `pl` • Portuguese (European): `pt_PT`

Field	Details
	• Romanian: `ro` • Slovak: `sk` • Slovenian: `sl` • Turkish: `tr` • Ukrainian: `uk` • Vietnamese: `vi` The following platform languages are available for organizations that use Salesforce exclusively as a platform. • Albanian: `sq` • Afrikaans: `af` • Amharic: `am` • Arabic (Algeria): `ar_DZ` • Arabic (Bahrain): `ar_BH` • Arabic (Egypt): `ar_EG` • Arabic (Iraq): `ar_IQ` • Arabic (Jordan): `ar_JO` • Arabic (Kuwait): `ar_KW` • Arabic (Lebanon): `ar_LB` • Arabic (Libya): `ar_LY` • Arabic (Morocco): `ar_MA` • Arabic (Oman): `ar_OM` • Arabic (Qatar): `ar_QA` • Arabic (Saudi Arabia): `ar_SA` • Arabic (Sudan): `ar_SD` • Arabic (Syria): `ar_SY` • Arabic (Tunisia): `ar_TN` • Arabic (United Arab Emirates): `ar_AE` • Arabic (Yemen): `ar_YE` • Armenian: `hy` • Basque: `eu` • Bosnian: `bs` • Bengali: `bn` • Burmese: `my` • Catalan: `ca` • Chinese (Hong Kong): `zh_HK` • Chinese (Singapore): `zh_SG` • Dutch (Belgium): `nl_BE` • English (Australia): `en_AU`

Field	Details
	• English (Canada): `en_CA` • English (Hong Kong): `en_HK` • English (India): `en_IN` • English (Ireland): `en_IE` • English (Malaysia): `en_MY` • English (New Zealand): `en_NZ` • English (Philippines): `en_PH` • English (Singapore): `en_SG` • English (South Africa): `en_ZA` • Estonian: `et` • Farsi: `fa` • French (Belgium): `fr_BE` • French (Canada): `fr_CA` • French (Luxembourg): `fr_LU` • French (Switzerland): `fr_CH` • Georgian: `ka` • German (Austria): `de_AT` • German (Belgium): `de_BE` • German (Luxembourg): `de_LU` • German (Switzerland): `de_CH` • Gujarati: `gu` • Hindi: `hi` • Icelandic: `is` • Irish: `ga` • Italian (Switzerland): `it_CH` • Kannada: `kn` • Khmer: `km` • Latvian: `lv` • Lithuanian: `lt` • Luxembourgish: `lb` • Macedonian: `mk` • Malay: `ms` • Malayalam: `ml` • Maltese: `mt` • Marathi: `mr` • Montenegrin: `sh_ME` • Romanian (Moldova): `ro_MD` • Romansh: `rm`

Field	Details
	• Serbian (Cyrillic): `sr` • Serbian (Latin): `sh` • Spanish (Argentina): `es_AR` • Spanish (Bolivia): `es_BO` • Spanish (Chile): `es_CL` • Spanish (Colombia): `es_CO` • Spanish (Costa Rica): `es_CR` • Spanish (Dominican Republic): `es_DO` • Spanish (Ecuador): `es_EC` • Spanish (El Salvador): `es_SV` • Spanish (Guatemala): `es_GT` • Spanish (Honduras): `es_HN` • Spanish (Nicaragua): `es_NI` • Spanish (Panama): `es_PA` • Spanish (Paraguay): `es_PY` • Spanish (Peru): `es_PE` • Spanish (Puerto Rico): `es_PR` • Spanish (United States): `es_US` • Spanish (Uruguay): `es_UY` • Spanish (Venezuela): `es_VE` • Swahili: `sw` • Tagalog: `tl` • Tamil: `ta` • Te reo: `mi` • Telugu: `te` • Urdu: `ur` • Welsh: `cy` • Xhosa: `xh` • Zulu: `zu` The values in this field are not related to the default locale selection.
`NamespacePrefix`	**Type** string **Properties** Filter, Nillable **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters.

Field	Details
	You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
`ScontrolId`	**Type** reference **Properties** Create, Filter, Nillable **Description** The ID of the Scontrol that is being translated.
`Value`	**Type** string **Properties** Create, Filter, Nillable, Update **Description** The actual translated field label of the s-control. Label is **Translation**.

Usage

Use this object to translate your s-controls into a supported language. Users with the Translation Workbench enabled can view s-control translations, but either the "Customize Application" or "Manage Translation" permission is required to create or update s-control translations.

SEE ALSO:

CategoryNodeLocalization

WebLinkLocalization

ScratchOrgInfo

Represents a scratch org and its audit log. Use this object to create a scratch org and keep a log of its creation and deletion. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
AdminEmail	**Type** email **Properties** Create, Filter, Group, Nillable, Sort **Description** The email address of the scratch org's Administration user. The read-only `SignupEmail` field is populated with this value. If you don't provide a value for `AdminEmail`, the field is left blank and the `SignupEmail` is populated with the email address of the org user who is creating this object.
AuthCode	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A one-time authorization code that can be exchanged for an OAuth access token and refresh token using standard Salesforce APIs. It's used with `ConnectedAppCallbackUrl` and `ConnectedAppConsumerKey`, when the specified connected app hasn't been configured with an X.509 certificate. This field is read-only.
ConnectedAppCallbackUrl	**Type** textarea **Properties** Create **Description** When used with `ConnectedAppConsumerKey`, specifies a connected app that is approved automatically during the scratch org creation.
ConnectedAppConsumerKey	**Type** string **Properties** Create, Filter, Group, Sort **Description** When used with `ConnectedAppCallbackUrl`, specifies a connected app that is approved automatically during the scratch org creation.

Field Name	Details
`Country`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** The two-character, upper-case ISO-3166 country code. You can find a full list of these codes at several sites, such as: www.iso.ch/iso/en/prods-services/iso3166ma/02iso-3166-code-lists/list-en1.html. The language of the scratch org is auto-determined based on the value of this field. If you do not specify a value, this field defaults to the Dev Hub's country code.
`DeletedBy`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The user who requested that the scratch org be deleted. This field is read-only.
`DeletedDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** The date when the `DeletedBy` user requested that the scratch org be deleted. This field is read-only.
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** A free-form text field for you to enter a description of this scratch org.
`DurationDays`	**Type** int **Properties** Create, Filter, Nillable, Group, Sort **Description** Number of days after which the scratch org expires. Valid values are 1–30. The default is 7.

Field Name	Details
Edition	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The org edition of this scratch org. Valid values are `Group`, `Developer`, `Enterprise`, and `Professional`.
ErrorCode	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The error code if the scratch org creation isn't successful. This field is read-only.
ExpirationDate	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Date when the scratch org expires. This field is read-only.
Features	**Type** textarea **Properties** Create, Nillable **Description** A semi-colon delimited list of the features enabled in this scratch org, such as MultiCurrency. See the *Salesforce DX Developer Guide* for the full list of valid features.
HasSampleData	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Specifies whether the scratch org contains sample data. If set to `true`, the sample data is similar to the data in a Salesforce free trial org.
Language	**Type** picklist

Field Name	Details
	Properties Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The language of the scratch org being created. Specify the language using a language code listed under "Supported Languages" in Salesforce Help. For example, use `zh_CN` for simplified Chinese. The value you select overrides the language set by locale. If you don’t specify a value, the language is based on the `Country` used during scratch org creation. If you don’t specify a value for `Country`, the value defaults to the Dev Hub’s country.
`LastLoginDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** The date of the last user login to the scratch org. This field is read-only.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date this scratch org was last referenced. This field is read-only.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date this scratch org was last viewed. This field is read-only.
`LoginUrl`	**Type** textarea **Properties** Nillable **Description** A URL that logs you in to the scratch org. This field is read-only.
`Name`	**Type** string

Field Name	Details
	Properties Autonumber, Defaulted on create, Filter, Sort **Description** The auto-generated ID of this scratch org. This field is read-only.
`Namespace`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** The namespace you want to associate with this scratch org. The value of this field corresponds to the `NamespacePrefix` field of the `NamespaceRegistry` object that describes your namespace.
`OrgName`	**Type** string **Properties** Create, Filter, Group, Sort **Description** The name of the scratch org.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the user who created this scratch org.
`Release`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The release of the scratch org. During Salesforce's major release transitions, this field allows you to select the Salesforce release version, based on the version of your Dev Hub. This field is available in API version 46.0 and later. Valid values are: • Current • Preview • Previous See Select the Salesforce Release for a Scratch Org for more information.

Field Name	Details
ScratchOrg	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The org ID of the scratch org. This field is read-only.
SignupCountry	**Type** string **Properties** Filter, Group, Sort **Description** The country code of the scratch org. This field is populated with the value of the `Country` field. If you didn’t provide a value for `Country`, it’s the country code of the Dev Hub. This field is read-only.
SignupEmail	**Type** email **Properties** Filter, Group, Sort **Description** The email address of the scratch org’s Administration user. This field is populated with the value of the `AdminEmail` field. If you didn't provide a value for `AdminEmail`, it's the email address of your user in the Dev Hub. This field is read-only.
SignupInstance	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The Salesforce instance on which this scratch org resides. This field is read-only.
SignupLanguage	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language of the scratch org. This field is populated with the value of the `Language` field. If you didn’t provide a value for `Language`, it’s the language of the Dev Hub. This field is read-only.

Field Name	Details
SignupTrialDays	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of days between the scratch org's creation and expiration. This field is read-only.
SignupUsername	**Type** string **Properties** Filter, Group, Sort **Description** The username of the Administration user of this scratch org. This field is populated with the value of the `Username` field. If you didn't provide a value for `Username`, the value of this field is auto-generated. This field is read-only.
SourceOrg	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the org whose shape (features, settings, limits, and licenses) information is used for creating scratch orgs.
Status	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The status of the scratch org, such as active, expired, or deleted. This field is read-only.
Username	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** The username of the Administration user of this scratch org.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ScratchOrgInfoFeed
Feed tracking is available for the object.

ScratchOrgInfoHistory
History is available for tracked fields of the object.

ScratchOrgInfoOwnerSharingRule
Sharing rules are available for the object.

ScratchOrgInfoShare
Sharing is available for the object.

SEE ALSO:
ActiveScratchOrg
NamespaceRegistry
Salesforce DX Developer Guide

SearchPromotionRule

Represents a promoted search term, which is one or more keywords that you associate with a Salesforce Knowledge article. When a user's search query includes these keywords, the associated article is returned first in search results. This object is available in API version 31.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

A user must have the "Manage Promoted Search Terms" permission.

Fields

Field Name	Details
`PromotedEntityId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the KnowledgeArticleVersion that the promoted search term is associated with. The article must be in published status.

Field Name	Details
`Query`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The text of the promoted search term. Maximum length: 100 characters. You can associate the same promoted search term with multiple articles. If the user's search matches the promoted term, all associated articles are promoted in search results, ordered by relevancy. For best results, create promoted search terms selectively and limit the number of articles that are promoted per term.

Usage

Use this object to optimize article search results in Salesforce Knowledge.

SecureAgent

Represents a Secure Agent that connects Salesforce to on-premises external data sources like SharePoint 2010 and 2013. This object is available in API version 32.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization.

Field Name	Details
	Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`Language`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language of agent labels in the user interface.
`MasterLabel`	**Type** string **Properties** Filter, Group, Sort **Description** The user-interface name for the agent.
`Priority`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Specifies the order in which this agent is accessed relative to others in a Secure Agent cluster. This field is available in API version 35 and later.
`ProxyUserId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the user profile specific to the agent.
`SecureAgentsClusterId`	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The ID of a cluster of agents that contains this individual agent. Clusters provide failover protection if an agent on a particular server becomes inaccessible. To edit them, use the SecureAgentsCluster object. This field is available in API version 35 and later.

SecureAgentsCluster

Represents a cluster consisting of several Secure Agents on different servers. Clusters provide failover protection if an agent on a particular server becomes inaccessible. This object is available in API version 35.0 and later.

Secure Agents connect Salesforce to content in on-premises external data sources, such as SharePoint 2010 and 2013. To edit individual agents that are part of a cluster, use the SecureAgent object.

Supported Calls

`describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Filter, Group, Nillable, Sort **Description** Describes details about the cluster, providing context to other developers.
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization.

Field Name	Details
	Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`Language`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language of cluster labels in the user interface.
`MasterLabel`	**Type** string **Properties** Filter, Group, Sort **Description** The user-interface name for the cluster.

SecurityCustomBaseline

Provides the ability to read, create, and delete user-defined custom security baselines, which define an org's security standards. This object is available in API version 39.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

You must have the "View Health Check" permission to read a custom baseline, and the "Manage Health Check" permission to create, edit, or delete one.

Fields

Field Name	Details
`Baseline`	**Type** textarea **Properties** Create, Nillable, Update

Field Name	Details
	Description The definition of an org's security settings standards.
DeveloperName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
IsDefault	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Sets the baseline as the default in Security Health Check.
Language	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the presence status.
MasterLabel	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label for the category node.
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The namespace prefix associated with the package.

SelfServiceUser

Represents a Contact who has been enabled to use your organization's Self-Service portal, where he or she can obtain online support.

Note: Starting with Spring '12, the Self-Service portal isn't available for new Salesforce orgs. Existing orgs continue to have access to the Self-Service portal.

Supported Calls

`create()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`ContactId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. All Self-Service users must be associated with a Contact. The contact's email should match the Self-Service user email. The contact must have a value in the `AccountId` field or an error occurs.
`Email`	**Type** email **Properties** Create, Filter, Group, Sort, Update **Description** Required. Make this the same as the email address for the Contact associated with this SelfServiceUser. Password resets and other system communication will be sent to this email address.
`FirstName`	**Type** string

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** First name of the Self-Service user.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the Self-Service user is allowed to log in to the Self-Service portal (`true`) or not (`false`). Note that there is no way to delete a Self-Service user. They can only be marked as inactive.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`LanguageLocaleKey`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. This is a restricted picklist field. It is the primary language for the user. All on-screen text in the Self-Service portal is displayed in this language.
`LastLoginDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time when the Self-Service user last logged in.
`LastName`	**Type** string **Properties** Create, Filter, Group, Sort, Update

Field	Details
	Description Required. Last name of the Self-Service user.
`LocaleSidKey`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. This is a restricted picklist field. The value of this field affects the formatting and parsing of values, especially numeric values, in the Self-Service portal. Values are two-letter codes that indicate language and sometimes language and country. The codes are based on ISO standards.
`Name`	**Type** string **Properties** Filter, Group, Sort **Description** Concatenation of `FirstName` and `LastName`. Limited to 203 characters, including whitespaces.
`SuperUser`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this Self-Service user is a super user with additional access on his or her company's Self-Service portal (`true`) or not (`false`).
`TimeZoneSidKey`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. This is a restricted picklist field. The time zone of a affects the offset used when displaying or entering times in the Self-Service portal.
`Username`	**Type** string **Properties** Create, Filter, Group, Sort, Update

Field	Details
	Description Required. This contains the name that a Self-Service user enters to log into the Self-Service portal. Value must be unique in your organization. If you try to create or update a user with a duplicate value, the operation is rejected and an error is returned.

Usage

For security reasons, you can't query Self-Service user passwords via the API or the user interface. However, the API allows you to set and reset Self-Service user passwords using the `setPassword()` and `resetPassword()` calls.

SelfServiceUser records created from the API don't cause a notification email to be sent. If you want to notify the user, you must send them an email after creating the user.

SEE ALSO:

Contact

User

ServiceAppointment

Represents an appointment to complete work for a customer in Field Service and Lightning Scheduler. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
`AccountId`	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description (Read only) The account associated with the appointment. If the parent record is a work order or work order line item, this field's value is inherited from the parent. Otherwise, it remains blank.
ActualDuration	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The number of minutes that it took the resource to complete the appointment after arriving at the address. When values are first added to the `Actual Start` and `Actual End` fields, the `Actual Duration` is automatically populated to list the difference between the `Actual Start` and `Actual End`. If the `Actual Start` and `Actual End` fields are subsequently updated, the `Actual Duration` field doesn't re-update, but you can manually update it.
ActualEndTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The actual date and time the appointment ended.
ActualStartTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The actual date and time the appointment started.
Address	**Type** address **Properties** Filter **Description** The address where the appointment is taking place. The address is inherited from the parent record if the parent record is a work order or work order line item.
AppointmentNumber	**Type** string

Field Name	Details
	Properties Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** An auto-assigned number that identifies the appointment.
`ArrivalWindowEndTime`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The end of the window of time in which the technician is scheduled to arrive at the site. This window is typically larger than the Scheduled Start and End window to allow time for delays and scheduling changes. You may choose to share the Arrival Window Start and End with the customer, but keep the Scheduled Start and End internal-only.
`ArrivalWindowStartTime`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The beginning of the window of time in which the technician is scheduled to arrive at the site. This window is typically larger than the Scheduled Start and End window to allow time for delays and scheduling changes. You may choose to share the Arrival Window Start and End with the customer, but keep the Scheduled Start and End internal-only.
`City`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The city where the appointment is completed. Maximum length is 40 characters.
`ContactId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The contact associated with the parent record. If needed, you can manually update the service appointment contact.

Field Name	Details
Country	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The country where the work order is completed. Maximum length is 80 characters.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** The description of the appointment.
DueDate	**Type** dateTime **Properties** Create, Filter, Sort, Update **Description** The date by which the appointment must be completed. Earliest Start Permitted and Due Date typically reflect terms in the customer's service-level agreement.
Duration	**Type** double **Properties** Create, Nillable, Filter, Sort, Update **Description** The estimated length of the appointment. If the parent record is work order or work order line item, the appointment inherits its parent's duration, but it can be manually updated. The duration is in minutes or hours based on the value selected in the `Duration Type` field.
DurationType	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The unit of the Duration: Minutes or Hours.
EarliestStartTime	**Type** dateTime

Field Name	Details
	Properties Create, Filter, Sort, Update **Description** The date after which the appointment must be completed. Earliest Start Permitted and Due Date typically reflect terms in the customer's service-level agreement.
`GeocodeAccuracy`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The level of accuracy of a location's geographical coordinates compared with its physical address. Usually provided by a geocoding service based on the address's latitude and longitude coordinates. Note: This field is available in the API only.
`IsAnonymousBooking`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether a service resource was automatically assigned to the appointment. The default value is false. This field is available in API version 49.0 and later.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the service appointment was last modified. Its label in the user interface is `Last Modified Date`.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the service appointment was last viewed.

Field Name	Details
Latitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `Longitude` to specify the precise geolocation of the address where the service appointments is completed. Acceptable values are numbers between –90 and 90 with up to 15 decimal places. Note: This field is available in the API only.
Longitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `Latitude` to specify the precise geolocation of the address where the service appointment is completed. Acceptable values are numbers between –180 and 180 with up to 15 decimal places. Note: This field is available in the API only.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The owner of the service appointment.
ParentRecordId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The parent record associated with the appointment. The parent record can't be updated after the service appointment is created.
ParentRecordStatusCategory	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort

Field Name	Details
	Description (Read only) The `Status Category` of the parent record. If the parent record is a work order or work order line item, this field is populated; otherwise, it remains blank.
`ParentRecordType`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** (Read only) The type of parent record: Account, Asset, Lead, Opportunity, Work Order, or Work Order Line Item.
`PostalCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The postal code where the work order is completed. Maximum length is 20 characters.
`SchedEndTime`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The time at which the appointment is scheduled to end. If you are using the Field Service managed package with the scheduling optimizer, this field is populated once the appointment is assigned to a resource. `Scheduled End` – `Scheduled Start` = `Estimated Duration`.
`SchedStartTime`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The time at which the appointment is scheduled to start. If you are using the Field Service managed package with the scheduling optimizer, this field is populated once the appointment is assigned to a resource.
`ServiceTerritoryId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The service territory associated with the appointment. If the parent record is a work order or work order line item, the appointment inherits its parent's service territory.
`State`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The state where the service appointment is completed. Maximum length is 80 characters.
`Status`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The status of the appointment. The picklist includes the following values, which can be customized: • `None`—Default value. • `Scheduled`—Appointment has been assigned to a service resource. • `Dispatched`—Assigned service resource has been notified about their assignment. • `In Progress`—Work has begun. • `Completed`—Work is complete. • `Cannot Complete`—Work could not be completed. • `Canceled`—Work is canceled, typically before any work began
`StatusCategory`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The category that each `Status` value falls into. The `Status Category` field's values are identical to the default `Status` values. If you create custom `Status` values, you must indicate which category it belongs to. For example, if you create a *`Customer Absent`* value, you may

Field Name	Details
	decide that it belongs in the `Cannot Complete` category. To learn which processes reference StatusCategory, see How are Status Categories Used?
`Street`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street number and name where the service appointment is completed.
`Subject`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A short phrase describing the appointment.
`WorkTypeId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The work type associated with the service appointment. The work type is inherited from the appointment's parent record if the parent is a work order or work order line item. Note: If Lightning Scheduler is also in use, this field is editable. However, users see an error if they update it to list a different work type than the parent record's work type.

Usage

Service appointments always have a parent record, which can be a work order, work order line item, opportunity, account, or asset. The type of parent record tells you about the nature of the service appointment:

- Service appointments on *work orders* and *work order line items* offer a more detailed view of the work being performed. While work orders and work order line items let you enter general information about a task, service appointments are where you add the details about scheduling and ownership.
- Service appointments on *assets* represent work being performed on the asset.
- Service appointments on *accounts* represent work being performed for the account.
- Service appointments on *opportunities* represent work that is related to the opportunity.
- Service appointments on *leads* represent work that is related to lead—for example, a site visit to pursue a promising lead.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ServiceAppointmentFeed
Feed tracking is available for the object.

ServiceAppointmentHistory
History is available for tracked fields of the object.

ServiceAppointmentOwnerSharingRule
Sharing rules are available for the object.

ServiceAppointmentShare
Sharing is available for the object.

ServiceAppointmentStatus

Represents a possible status of a service appointment in field service.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
`ApiName`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The API name of the status value.
`IsDefault`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates that the status value is the default status on service appointments. Only one status value can be the default.

Field Name	Details
`MasterLabel`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The label for the picklist value that appears in the UI.
`SortOrder`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The value's position in the drop-down list of values in the UI.
`StatusCode`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The status category that the value corresponds to. The Status Category field has seven values which are identical to the default Status values.

Usage

The Status field on service appointments comes with the following values:

- None—Default value.
- Scheduled—Appointment has been assigned to a service resource.
- Dispatched—Assigned service resource has been notified about their assignment.
- In Progress—Work has begun.
- Completed—Work is complete.
- Cannot Complete—Work could not be completed.
- Canceled—Work is canceled, typically before any work began

The ServiceAppointmentStatus object corresponds to the Status field. Adding a value to the Status field—for example, Waiting—creates a service appointment status record, and vice versa.

Note: Service appointments also come with a StatusCategory field whose values are identical to the default Status values. If you create custom Status values, you must indicate which category it belongs to. For example, if you create a *`Customer Absent`* value, you may decide that it belongs in the *`Cannot Complete`* category. To learn which processes reference StatusCategory, see How are Status Categories Used?

ServiceChannel

Represents a channel of work items that are received from your organization—for example, cases, chats, or leads. This object is available in API version 32.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

To access this object, Omni-Channel must be enabled.

As of Spring '20 and later, only authenticated internal and external users can access this object.

Fields

Field	Details
`CapacityModel`	**Type** picklist **Properties** Create, Filter, Group, Nillable, RestrictedPicklist, Sort, Update **Description** The method that determines when an agent's capacity for a work item is released. With the Status-Based capacity routing model, work remains assigned and applied to an agent's capacity until the work is completed or reassigned to a different agent. In contrast, the tab-based capacity model releases an agent's capacity when a work tab is closed in the service console. Possible values are StatusBased and TabBased.
`CapacityPercentage`	**Type** percent **Properties** Create, Filter, Nillable, Sort **Description** The percentage of an agent's capacity for work items that's consumed by a specific type of work item from this service channel. For example, you might give phone calls a capacity percentage of *100*. If an agent receives a phone call, the agent won't receive new work items until the call ends, because at that point the agent's capacity will have reached 100%. This field is available in API version 32.0 and earlier. For later API versions, you can set the capacity percentage of work items on the QueueRoutingConfig object. The CapacityPercentage field was removed in API version 33.0.

Field	Details
`CapacityWeight`	**Type** double **Properties** Create, Filter, Nillable, Sort **Description** The amount of an agent's capacity for work items that's consumed by a work item from this service channel. For example, if an agent has a capacity of *6*, and cases are assigned a capacity weight of *2*, an agent can be assigned up to 3 cases before the agent is at capacity and can't receive new work items. This field is available in API version 32.0 and earlier. For later API versions, you can set the capacity weight of work items on the QueueRoutingConfig object. The CapacityWeight field was removed in API version 33.0.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`DoesCheckCapOnOwnerChange`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** In the Status-Based capacity routing model, when work is reassigned to a specific agent, you can choose to override the capacity check and keep the work assigned to the agent. The default value is false.
`DoesCheckCapOnStatusChange`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description In the Status-Based capacity routing model, when work is reopened, you can choose to override the capacity check and keep the work assigned to a specific agent. The default value is false.
DoesMinimizeWidgetOnAccept	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Automatically minimizes the Omni-Channel widget when an agent accepts work. The default value is false.
Language	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the service channel.
MasterLabel	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The label of the service channel.
RelatedEntity	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of object that's associated with this service channel. This field is unique within your organization.
SecRoutingPriorityField	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The name of the standard field or the id of the custom field that is used for secondary routing priority. This field is unique within your organization.

Field	Details
StatusField	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The picklist field that you use to track work status in the Status-Based capacity routing model. Use ServiceChannelStatusField to specify the values that indicate completed and in-progress work-item status.

ServiceChannelFieldPriority

Represents a secondary routing priority field-value mapping. This object is available in API version 47.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

To access this object, Omni-Channel must be enabled.

Fields

Field	Details
Priority	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The priority number assigned to the mapped field value.
ServiceChannelId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the service channel.
Value	**Type** string

Field	Details
	Properties Create, Filter, Group, Sort, Update **Description** The value of the SecRoutingPriorityField field defined in parent ServiceChannel.

ServiceChannelStatus

Represents the status that's associated with a specific service channel. This object is available in API version 32.0 and later.

Supported Calls

`create()`, `delete()`, `query()`, `update()`, `retrieve()`

Special Access Rules

To access this object, Omni-Channel must be enabled.

As of Spring '20 and later, only authenticated internal and external users can access this object.

Fields

Field	Details
`ServiceChannelId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the service channel.
`ServicePresenceStatusId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the presence status that's associated with the service channel that's specified by the `ServicePresenceChannelId`.

ServiceChannelStatusField

Represents the values that you use to indicate completed and in-progress work item status for the status field in the Status-Based Capacity routing model. This object is available in API version 49.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

To access this object, Omni-Channel and Status-Based Capacity Model must be enabled.

Fields

Field	Details
`ServiceChannelId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the service channel.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** For the field that you use to track work status, specifies whether the values are for completed or in-progress work.
`Value`	**Type** string **Properties** Create, Filter, Group, Sort **Description** Specifies the values that you use to indicate completed and in-progress work status.

ServiceContract

Represents a customer support contract (business agreement). This object is available in API version 18.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`AccountId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the account associated with the service contract.
`ActivationDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The initial day the service contract went into effect (whereas `StartDate` may include a renewal date).
`ApprovalStatus`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** Approval status of the service contract.
`BillingAddress` (beta)	**Type** address **Properties** Filter, Nillable **Description** The compound form of the billing address. Read-only. See Address Compound Fields for details on compound address fields.
`BillingCity`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description Details for the billing address. Maximum size is 40 characters.
`BillingCountry`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address. Maximum size is 40 characters.
`BillingCountryCode`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO country code for the service contract's billing address.
`BillingLatitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `BillingLongitude` to specify the precise geolocation of a billing address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
`BillingLongitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `BillingLatitude` to specify the precise geolocation of a billing address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places.
`BillingPostalCode`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address. Maximum size is 20 characters.

Field	Details
BillingState	**Type** string **Properties** Group, Sort, Filter, Nillable **Description** Details for the billing address. Maximum size is 20 characters.
BillingStateCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO state code for the service contract's billing address.
BillingStreet	**Type** textarea **Properties** Filter, Group, Nillable, Sort **Description** Street address for the billing address.
ContactId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Required. ID of the Contact associated with the service contract. Must be a valid ID.
ContractNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** Unique number automatically assigned to the service contract.
Description	**Type** textarea **Properties** Nillable **Description** Description of the service contract.

Field	Details
Discount	**Type** percent **Properties** Filter, Nillable, Sort **Description** The last day the service contract is in effect.
EndDate	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** The last day the service contract is in effect.
GrandTotal	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total price of the service contract plus shipping and taxes.
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
LastReferencedDate	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
LastViewedDate	**Type** date **Properties** Filter, Nillable, Sort, Update

Field	Details
	Description The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (`LastReferencedDate`) but not viewed it.
`LineItemCount`	**Type** int **Properties** Filter, Nillable, Group, Sort **Description** Number of ContractLineItem records associated with the service contract.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Name of the service contract.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the user who currently owns the service contract.
`ParentServiceContractId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The service contract's parent service contract, if it has one.
`Pricebook2Id`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the Pricebook2 associated with the service contract. Must be a valid ID.
`RootServiceContractId`	**Type** reference

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** (Read only) The top-level service contract in a service contract hierarchy. Depending on where a service contract lies in the hierarchy, its root could be the same as its parent.
ShippingAddress (beta)	**Type** address **Properties** Filter, Nillable **Description** The compound form of the shipping address. Read-only. See Address Compound Fields for details on compound address fields.
ShippingCity	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details of the shipping address. Maximum size is 40 characters.
ShippingCountry	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details of the shipping address. Country maximum size is 40 characters.
ShippingCountryCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO country code for the service contract's shipping address.
ShippingLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update

Field	Details
	Description Used with `ShippingLongitude` to specify the precise geolocation of a shipping address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
`ShippingLongitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `ShippingLatitude` to specify the precise geolocation of an address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places.
`ShippingPostalCode`	**Type** string **Properties** Create, Filter, Nillable, Update **Description** Details of the shipping address. Postal code maximum size is 20 characters.
`ShippingState`	**Type** string **Properties** Create, Filter, Nillable, Update **Description** Details of the shipping address. State maximum size is 20 characters.
`ShippingStateCode`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO state code for the service contract’s shipping address.
`ShippingStreet`	**Type** textarea **Properties** Create, Filter, Nillable, Update **Description** The street address of the shipping address. Maximum of 255 characters.

Field	Details
SpecialTerms	**Type** textarea **Properties** Create, Nillable, Update **Description** Any terms specifically agreed to and tracked in the service contract.
StartDate	**Type** date **Properties** Create, Filter, Nillable, Update **Description** The first day the service contract is in effect.
Status	**Type** picklist **Properties** Filter, Nillable **Description** The status of the service contract, such as Inactive.
Subtotal	**Type** currency **Properties** Filter, Nillable **Description** Total of the service contract line items (products) before discounts, taxes, and shipping are applied.
Tax	**Type** currency **Properties** Create, Filter, Nillable, Update **Description** Total taxes for the service contract.
Term	**Type** int **Properties** Create, Filter, Nillable, Update

Field	Details
	Description Number of months that the service contract is valid.
TotalPrice	**Type** currency **Properties** Filter, Nillable **Description** Total of the contract line items (products) after discounts and before taxes and shipping.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ServiceContractFeed (API version 23.0)
Feed tracking is available for the object.

ServiceContractHistory
History is available for tracked fields of the object.

ServiceContractOwnerSharingRule
Sharing rules are available for the object.

ServiceContractShare
Sharing is available for the object.

SEE ALSO:

ServiceContractOwnerSharingRule

ServiceContractOwnerSharingRule

Represents the rules for sharing a ServiceContract (customer service agreement) with users other than the owner. This object is available in API version 18.0 and later.

Note: To enable access to this object for your org, contact Salesforce customer support. However, we recommend that you instead use Metadata API to programmatically update owner sharing rules because it triggers automatic sharing rule recalculation. The SharingRules Metadata API type is enabled for all orgs.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
AccessLevel	**Type** picklist **Properties** Create, Filter, Group, Sort, Update **Description** A value that represents the type of sharing allowed. The possible values are: • Read • Edit
Description	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters. This field is available in API version 29.0 and later.
DeveloperName	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. This field is available in API version 24.0 and later. Note: When creating large sets of data, always specify a unique DeveloperName for each record. If no DeveloperName is specified, performance may slow while Salesforce generates one for each record.
GroupId	**Type** reference **Properties** Create, Filter, Group, Sort,

Field Name	Details
	Description The ID representing the source group. Service contracts owned by users in the source group trigger the rule to give access.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** in the user interface.
`UserorGroupId`	**Type** reference **Properties** Create, Filter **Description** The ID representing the target user or group. Target users or groups are given access.

Usage

Use this object to manage the sharing rules for a service contract. General sharing and territory management-related sharing use this object.

SEE ALSO:

ServiceContract

Metadata API Developer Guide: SharingRules

ServiceCrew

Represents a group of service resources who can be assigned to service appointments as a unit.

A service crew is a group of service resources whose combined skills and experience make them a good fit to work together on appointments. For example, a wellhead repair crew might include a hydrologist, a mechanical engineer, and an electrician.

Service appointments can only be assigned to service resources. To assign a service crew to service appointments, you must create a service resource with a resource type of Crew that represents the crew, then use the resource for assignment purposes.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
`CrewSize`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The number of members on the crew. This field is manual, so it doesn't auto-update when you add or remove members.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the service crew was last modified. Its label in the user interface is `Last Modified Date`.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the service crew was last viewed.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the service crew. For example, Repair Crew.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field Name	Details
	Description The crew owner. By default, the owner is the person who created the service crew.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ServiceCrewFeed
Feed tracking is available for the object.

ServiceCrewHistory
History is available for tracked fields of the object.

ServiceCrewOwnerSharingRule
Sharing rules are available for the object.

ServiceCrewShare
Sharing is available for the object.

ServiceCrewMember

Represents a technician service resource that belongs to a service crew.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
`EndDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The last day that the service resource belongs to the crew. You can use this field to track employment dates for contractors.

Field Name	Details
IsLeader	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates that the member is the crew leader.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the service crew member was last modified. Its label in the user interface is `Last Modified Date`.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the service crew member was last viewed.
ServiceCrewId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The crew that the service resource belongs to.
ServiceCrewMemberNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** An auto-generated number identifying the service crew member.
ServiceResourceId	**Type** reference **Properties** Create, Filter, Group, Sort, Update

Field Name	Details
	Description The service resource that belongs to the crew. Only service resources whose resource type is Technician can be added to service crews.
`StartDate`	**Type** dateTime **Properties** Create, Filter, Sort, Update **Description** Required. The day the service resource joins the crew. Service resources can belong to multiple crews as long as their start and end dates don't overlap.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ServiceCrewMemberFeed
Feed tracking is available for the object.

ServiceCrewMemberHistory
History is available for tracked fields of the object.

ServiceCrewOwnerSharingRule

Represents the rules for sharing a service crew with user records other than the owner or anyone above the owner in the role hierarchy.

Note: To enable access to this object for your org, contact Salesforce customer support. However, we recommend that you instead use Metadata API to programmatically update owner sharing rules because it triggers automatic sharing rule recalculation. The SharingRules Metadata API type is enabled for all orgs.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service must be enabled.

Fields

Field	Details
`Description`	**Type** textarea

Field	Details
	Properties Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group. A service crew owned by a User in the source Group triggers the rule to give access.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.
`ServiceResourceAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update

Field	Details
	Description A value that represents the type of access granted to the target Group, or UserRole. The possible values are: • `Read` • `Edit` • `All`
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the User or Group being granted access.

ServicePresenceStatus

Represents a presence status that can be assigned to a service channel. This object is available in API version 32.0 and later.

Supported Calls

`create()`, `delete()`, `query()`, `update()`, `retrieve()`

Special Access Rules

To access this object, Omni-Channel must be enabled.

As of Spring '20 and later, only authenticated internal and external users can access this object.

Fields

Field	Details
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With

Field	Details
	this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`Language`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The language of the presence status.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort **Description** The label of the presence status.

ServiceReport

Represents a report that summarizes a work order, work order line item, or service appointment.

The fields that appear on a service report are determined by its service report template. Service reports can be signed by the customer and shared as a PDF.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
`ContentVersionDocumentId`	**Type** reference

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** ID of the service report version, used for storage.
`DocumentBody`	**Type** base64 **Properties** Create, Nillable **Description** The report output.
`DocumentContentType`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of data used for the report output: application/pdf.
`DocumentLength`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The length of the report output.
`DocumentName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** The name of the report output, always set to Service Report.
`IsSigned`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Indicates whether the service report contains one or more signatures. Tip: Add this field to the Service Reports related list on work orders, work order line items, and service appointments.

Field Name	Details
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the service appointment, work order, or work order line item that the service report summarizes. For example, if you click **Create Service Report** on a service appointment, this field lists the service appointment's record ID.
ServiceReportLanguage	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Restricted picklist **Description** The language used for the service report. The language is selected in the `ServiceReportLanguage` field on the associated work order. If the work order doesn't specify a service report language, the report is translated in the default language in Salesforce of the person generating the report.
ServiceReportNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** An auto-generated number identifying the service report.
Template	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** The service report template used to generate the service report. Note: If the person creating the service report doesn't have access to certain objects or fields that are included in the service report template, those fields aren't visible in the report they create.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ServiceReportHistory
History is available for tracked fields of the object.

ServiceReportLayout

Represents a service report template in field service.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Field Service must be enabled. All users with Field Service Standard user permission can view the ServiceReportLayout object via the API.

Fields

Field Name	Details
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The developer name of the service report template.
`Language`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language that the service report template uses.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date the service report template was last viewed.
`MasterLabel`	**Type** string **Properties** Filter, Group, Sort

Field Name	Details
	Description The name of the service report template. For example, Maintenance Report Template.

ServiceResource

Represents a service technician or service crew in field service in Field Service and Lightning Scheduler. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** The description of the resource.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** When selected, this option means that the resource can be assigned to work orders. For service tracking purposes, resources can’t be deleted, so deactivating a resource is the best way to send them into retirement. Deactivating a user deactivates the related service resource. You can’t create a service resource that is linked to an inactive user.

Field Name	Details
`IsCapacityBased`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Capacity-based resources are limited to a certain number of hours or appointments in a specified time period. Tip: The Capacities related list shows a resource's capacity.
`IsOptimizationCapable`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** This field is reserved for Field Service and the managed package. Create a custom field instead of using this field to indicate whether optimization should use a service resource.
`LastKnownLatitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The latitude of the last known location.
`LastKnownLongitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The longitude of the last known location.
`LastKnownLocation`	**Type** location **Properties** Nillable **Description** The service resource's last known location. You can configure this field to display data collected from a custom mobile app. This field is not visible in the user interface, but you can expose it on service resource page layouts or set up field tracking to be able to view a resource's location history.

Field Name	Details
LastKnownLocationDate	**Type** dateTime **Properties** Filter, Nillable, Sort, Update **Description** The date and time of the last known location.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the service resource was last modified. Its label in the user interface is `Last Modified Date`.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the service resource was last viewed.
LocationId	**Type** reference **Properties** Create, Filter, Group, Sort, Nillable, Update **Description** The location associated with the service resource. For example, a service vehicle driven by the service resource.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The resource's name. You'll likely want this to be the name or title of the associated user or service crew.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field Name	Details
	Description The owner of the service resource.
RelatedRecordId	**Type** reference **Properties** Create, Filter, Group, Sort, Nillable, Update **Description** The associated user. Its label in the UI is `User`. If the service resource represents a service crew rather than a user, leave the `User` field blank and select the related crew in the `ServiceCrewId` field.
ResourceType	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates whether the resource is a Technician (T), Dispatcher (D), Crew (C), Asset (S), Agent (A), or Planner (P). The default value is Technician (T). Resources who are dispatchers can't be capacity-based or included in scheduling optimization. Only users with the Field Service Dispatcher permission set license can be dispatchers. You can't add additional resource types.
ServiceCrewId	**Type** reference **Properties** Create, Filter, Group, Sort, Nillable, Update **Description** The associated service crew. If the service resource represents a crew, select the crew. Note: This field is hidden for all users by default. To use it, update its field-level security settings in Setup and add it to your service resource page layouts.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ServiceResourceFeed
Feed tracking is available for the object.

ServiceResourceHistory
History is available for tracked fields of the object.

ServiceResourceOwnerSharingRule
Sharing rules are available for the object.

ServiceResourceShare
Sharing is available for the object.

ServiceResourceCapacity

Represents the maximum number of scheduled hours or number of service appointments that a capacity-based service resource can complete within a specific time period. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
`CapacityInHours`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The number of hours that the resource can work per time period. You must fill out this field, the `CapacityInWorkItems` field, or both.
`CapacityInWorkItems`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The total number of service appointments that the resource can complete per time period. You must fill out this field, the `CapacityInHours` field, or both.
`CapacityNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort

Field Name	Details
	Description (Read only) An auto-generated number identifying the capacity record.
EndDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date the capacity ends; for example, the end date of a contract.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
ServiceResourceId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The associated service resource. You can set multiple capacities for a resource as long as their start and end dates do not overlap.
StartDate	**Type** date **Properties** Create, Filter, Group, Sort **Description** The date the capacity goes into effect.

Field Name	Details
`TimePeriod`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Days, Hours, or Months. For example, if a resource can work 80 hours per month, the capacity's `Time Period` would be *`Month`* and `Hours per Time Period` would be *`80`*.

Usage

Service resources who are capacity-based can only work a certain number of hours or complete a certain number of service appointments within a specified time period. Contractors tend to be capacity-based. To indicate that a service resource is capacity-based, select **Capacity-Based** on the service resource record, then create a capacity record for the service resource.

You must fill out at least one of these fields: `CapacityInWorkItems` and `CapacityInHours`. If you're using the Field Service managed package and would like to measure capacity both in hours and in number of work items, enter a value for both. The resource is considered to reach their capacity based on whichever term is met first—hours or number of work items.

Important: If you aren't using the Field Service managed package, capacity serves more as a suggestion than a rule. Resources can still be as scheduled beyond their capacity, and you aren't notified when a resource exceeds their capacity.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ServiceResourceCapacityFeed
Feed tracking is available for the object.

ServiceResourceCapacityHistory
History is available for tracked fields of the object.

ServiceResourceCapacityHistory

Represents the history of changes made to tracked fields on a service resource capacity record. This object is available in API version 38.0 and later.

Supported Calls

`getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Special Access Rules

Field Service must be enabled in your organization, and field tracking for service resource capacity fields must be configured.

Fields

Field Name	Details
`DataType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Data type of the field that was changed.
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The value of the field before it was changed.
`ServiceResourceCapacityId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the service resource capacity being tracked. The history is displayed on the detail page for this record.

ServiceResourceOwnerSharingRule

Represents the rules for sharing a service resource with user records other than the owner or anyone above the owner in the role hierarchy. This object is available in API version 38.0 and later.

Note: To enable access to this object for your org, contact Salesforce customer support. However, we recommend that you instead use Metadata API to programmatically update owner sharing rules because it triggers automatic sharing rule recalculation. The SharingRules Metadata API type is enabled for all orgs.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort

Field	Details
	Description The ID representing the source group. A service resource owned by a User in the source Group triggers the rule to give access.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.
`ServiceResourceAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of access granted to the target Group, or UserRole. The possible values are: • `Read` • `Edit` • `All`
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the User or Group being granted access.

ServiceResourceSkill

Represents a skill that a service resource possesses in Field Service and Lightning Scheduler. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
EffectiveEndDate	**Type** datetime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date when the skill expires. For example, if a service resource needs to be re-certified after six months, the end date would be the date their certification expires.
EffectiveStartDate	**Type** datetime **Properties** Create, Filter, Sort, Update **Description** The date when the service resource gains the skill. For example, if the skill represents a certification, the start date would be the date of certification.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the resource skill was last modified. Its label in the user interface is `Last Modified Date`.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the resource skill was last viewed.
ServiceResourceId	**Type** reference **Properties** Create, Filter, Group, Sort

Field Name	Details
	Description The service resource who possesses the skill.
SkillId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The skill the service resource possesses.
SkillLevel	**Type** double **Properties** Create, Defaulted on create, Filter, Nillable, Sort, Update **Description** The service resource's skill level. Skill level can range from zero to 99.99.
SkillNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** An auto-generated number identifying the resource skill assignment.

Usage

You can assign skills to all service resources in your org to indicate their certifications and areas of expertise, and specify each resource's skill level from 0 to 99.99. For example, you can assign Maria the "Welding" skill, level 50.

If you intend to use the skills feature, determine which skills you want to track and how skill level should be determined. For example, you may want the skill level to reflect years of experience, certification levels, or license classes.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ServiceResourceSkillFeed
: Feed tracking is available for the object.

ServiceResourceSkillHistory
: History is available for tracked fields of the object.

ServiceTerritory

Represents a geographic or functional region in which field service work can be performed in Field Service and Lightning Scheduler. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
`Address`	**Type** address **Properties** Filter **Description** An address to associate with the territory. You may want to list the address of the territory's headquarters.
`City`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The city of the associated address. Maximum length is 40 characters.
`Country`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The country to associate with the territory. Maximum length is 80 characters.
`Description`	**Type** textarea **Properties** Create, Nillable, Update

Field Name	Details
	Description The description of the territory.
`GeocodeAccuracy`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The level of accuracy of a location's geographical coordinates compared with its physical address. Usually provided by a geocoding service based on the address's latitude and longitude coordinates. Note: This field is available in the API only.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the service territory is meant to be used. If a territory is inactive, you can't add members to it or link it to work orders, work order line items, or service appointments.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the territory was last modified. Its label in the user interface is `Last Modified Date`.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the territory was last viewed.
`Latitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update

Field Name	Details
	Description Used with `Longitude` to specify the precise geolocation of the address associated with the territory. Acceptable values are numbers between –90 and 90 with up to 15 decimal places. Note: This field is available in the API only.
`Longitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `Latitude` to specify the precise geolocation of the address associated with the territory. Acceptable values are numbers between –180 and 180 with up to 15 decimal places. Note: This field is available in the API only.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the territory.
`OperatingHoursId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The territory's operating hours, which indicate when service appointments within the territory can occur. Service resources who are members of a territory automatically inherit the territory's operating hours unless different hours are specified on the resource record.
`ParentTerritoryId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The territory's parent service territory, if it has one. For example, a *`Northern California`* territory can have a *`State of California`* territory as its parent. A service territory hierarchy can contain up to 10,000 territories.

Field Name	Details
`PostalCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The postal code of the address associated with the territory. Maximum length is 20 characters.
`State`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The state of the address associated with the territory. Maximum length is 80 characters.
`Street`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street number and name of the address associated with the territory.
`TopLevelTerritoryId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** (Read only) The top-level territory in a hierarchy of service territories. Depending on where a territory lies in the hierarchy, its top-level territory might be the same as its parent.
`TypicalInTerritoryTravelTime`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Estimated number of minutes needed to travel from one location to another within the service territory. You can use this field in Apex customization.

Usage

If you want to use service territories, determine which territories you need to create. Depending on how your business works, you may decide to create territories based on cities or counties, or on functional categories such as sales versus service. If you plan to build out a hierarchy of service territories, create the highest-level territories first.

For example, you can create a hierarchy of territories to represent the areas where your team works in California. Include a top-level territory named `California`, three child territories named `Northern California`, `Central California`, and `Southern California`, and a series of third-level territories corresponding to California counties. Assign service resources to each county territory to indicate who is available to work in that county.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ServiceTerritoryFeed
Feed tracking is available for the object.

ServiceTerritoryHistory
History is available for tracked fields of the object.

ServiceTerritoryOwnerSharingRule
Sharing rules are available for the object.

ServiceTerritoryShare
Sharing is available for the object.

ServiceTerritoryLocation

Represents a location associated with a particular service territory in field service.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
`LocationId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update

Field Name	Details
	Description The location that is associated with the service territory.
`ServiceTerritoryId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The associated service territory.
`ServiceTerritoryLocationNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** (Read only) Auto-generated number identifying the service territory location.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ServiceTerritoryLocationFeed
Feed tracking is available for the object.

ServiceTerritoryLocationHistory
History is available for tracked fields of the object.

ServiceTerritoryMember

Represents a service resource who can be assigned to service appointments in a service territory in Field Service and Lightning Scheduler. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
`Address`	**Type** address **Properties** Filter **Description** The member's address. You may want to list the related service resource's address in this field.
`City`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The city of the member's address. Maximum length is 40 characters.
`Country`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The country of the member's address. Maximum length is 80 characters.
`EffectiveEndDate`	**Type** datetime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date when the service resource is no longer a member of the territory. If the resource will be working in the territory for the foreseeable future, leave this field blank. This field is mainly useful for indicating when a temporary relocation ends.
`EffectiveStartDate`	**Type** datetime **Properties** Create, Filter, Sort, Update **Description** The date when the service resource becomes a member of the service territory.
`GeocodeAccuracy`	**Type** picklist

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The level of accuracy of a location's geographical coordinates compared with its physical address. Usually provided by a geocoding service based on the address's latitude and longitude coordinates. Note: This field is available in the API only.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the territory member was last modified. Its label in the user interface is `Last Modified Date`.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the territory member was last viewed.
`Latitude`	**Type** double **Properties** Create, Defaulted on create, Filter, Nillable, Sort, Update **Description** Used with `Longitude` to specify the precise geolocation of the member's address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places. Note: This field is available in the API only.
`Longitude`	**Type** double **Properties** Create, Defaulted on create, Filter, Nillable, Sort, Update **Description** Used with `Latitude` to specify the precise geolocation of the member's address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places.

Field Name	Details
	Note: This field is available in the API only.
`MemberNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** (Read only) An auto-generated number identifying the service territory member.
`OperatingHoursId`	**Type** reference **Properties** Create, Filter, Group, Sort, Nillable, Update **Description** The operating hours assigned to the service territory member. If no operating hours are specified, the member is assumed to use their parent service territory's operating hours. If a member needs special operating hours, create them in Setup and select them in the `Operating Hours` lookup field on the member's detail page.
`PostalCode`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The postal code of the member's address. Maximum length is 20 characters.
`ServiceResourceId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The service resource assigned to the service territory.
`ServiceTerritoryId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The service territory that the service resource is assigned to.

Field Name	Details
State	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The state of the member's address. Maximum length is 80 characters.
Street	**Type** textarea **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The street number and name of the member's address.

TerritoryType	**Type**
	picklist
	Properties
	Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update
	Description
	Primary, Secondary, or Relocation.
	• The primary territory is typically the territory where the resource works most often—for example, near their home base. Service resources can only have one primary territory.
	• Secondary territories are territories where the resource can be assigned to appointments if needed. Service resources can have multiple secondary territories.
	• Relocation territories represent temporary moves for service resources. If you're using the Field Service managed packages with the scheduling optimizer, resources with relocation territories are always assigned to services within their relocation territories during the specified relocation dates; if they don't have a relocation territory, the primary territories are favored over the secondary.
	For example, a service resource might have the following territories:
	• Primary territory: *West Chicago*
	• Secondary territories:
	  – *East Chicago*
	  – *South Chicago*
	• Relocation territory: *Manhattan*, for a three-month period

Usage

If you delete a service territory with members, the service resources who were members no longer have any connection to the territory.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ServiceTerritoryMemberFeed
Feed tracking is available for the object.

ServiceTerritoryMemberHistory
History is available for tracked fields of the object.

ServiceTerritoryWorkType

Represents the relationship between a ServiceTerritory object and a WorkType object for Lightning Scheduler appointments. This object is available in API version 45.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the current user last viewed a record related to this object.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this object.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort

Field	Details
	Description The name of this service territory-work type relationship.
`ServiceTerritoryId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the service territory that's related to the work type indicated in the `WorkTypeId` field.
`WorkTypeId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the work type that's related to the service territory indicated in the `ServiceTerritoryId` field.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ServiceTerritoryWorkTypeFeed
Feed tracking is available for the object.

ServiceTerritoryWorkTypeHistory
History is available for tracked fields of the object.

SessionPermSetActivation

The SessionPermSetActivation object represents a permission set assignment activated during an individual user session. When a SessionPermSetActivation object is inserted into a permission set, an activation event fires, allowing the permission settings to apply to the user's specific session. This object is available in API versions 37.0 and later.

Supported Calls

`describeLayout()`, `query()`, `retrieve()`

Note: If you include session-based permission sets in a permission set group, the permissions in them do not require session-based activation for users assigned to the group.

Special Access Rules

As of Summer '20 and later, only users who have one of these permissions can access this object:

- View Setup and Configuration
- Manage Session Permission Set Activations

Fields

Field Name	Details
AuthSessionId	**Type** reference **Properties** Filter, Group, Sort **Description** The session ID related to this permission set assignment for its duration.
Description	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The session details, such as device used and browser.
PermissionSetId	**Type** reference **Properties** Filter, Group, Sort **Description** The permission set ID related to this permission set assignment and user for its duration.
UserId	**Type** reference **Properties** Filter, Group, Sort **Description** The user ID of the user to whom this permission set assignment applies for its duration.

Usage

Use SessionPermSetActivation to create a permission set available only for a specified session's duration. For example, create permission sets that provide access to specific applications only during authenticated sessions.

In the following Apex example, an identified session is activated after session information is submitted via a button. Successful activation results in a confirmation message displayed to the user.

```
public class SessionPermSetActivationController {
    // id of the session permission set to be activated
    private final String sessionPermSetId = '0PSxx00000004rJ';
    private final String sessionId;

    public SessionPermSetActivationController() {
       Map<String, String> sessionManagement = Auth.SessionManagement.getCurrentSession();

        sessionId = sessionManagement.get('SessionId');
    }

    public PageReference activate() {
        // activate the permission set
        SessionPermSetActivation activation = new SessionPermSetActivation();
        activation.AuthSessionId = sessionId;
        activation.PermissionSetId = sessionPermSetId;
        activation.Description = 'created by SessionPermSetActivationController';

        insert activation;
        return null;
    }

    public boolean getActivated() {
        Integer alreadyActivated =  [SELECT count()
                                       FROM SessionPermSetActivation
                                       WHERE AuthSessionId = :sessionId
                                      And PermissionSetId = :sessionPermSetId  LIMIT
 1];
        return alreadyActivated > 0;
    }
}


<apex:page controller="SessionPermSetActivationController">
      <apex:outputPanel rendered="{!!Activated}">
          <h3>Activate Session Permission Set</h3>
          <br />
          <apex:form >
                <apex:commandButton action="{!activate}" value="Activate"
id="activateButton"/>
          </apex:form>
      </apex:outputPanel>
      <apex:outputPanel rendered="{!Activated}">
          <h3>Session Permission Set is already active.</h3>
      </apex:outputPanel>
</apex:page>
```

SetupAuditTrail

Represents changes you or other admins made in your org's Setup area for at least the last 180 days. This object is available in API version 15.0 and later.

Note: SetupAuditTrail is not a supported standard controller. Using SetupAuditTrail as a standard controller in a Visualforce page results in an error.

Supported Calls

`query()`, `retrieve()`

Note: Aggregate queries aren't supported on this object. For example, `SELECT count() FROM SetupAuditTrail` works but `SELECT count(Id) FROM SetupAuditTrail` fails.

Fields

Field	Details
`Action`	**Type** string **Properties** Filter, Sort **Description** The category of the change made in Setup. For example, a value of *`PermSetCreate`* indicates that an administrator created a permission set. The `Display` field contains more specific information.
`CreatedByContext`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The context under which the Setup change was made. For example, if Einstein uses cloud-to-cloud services to make a change in Setup, the value of this field is *`Einstein`*. This field is available in API version 48.0 and later.
`CreatedByIssuer`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Reserved for future use.

Field	Details
`DelegateUser`	**Type** string **Properties** Filter, Nillable, Sort **Description** The Login-As user who executed the action in Setup. If a Login-As user didn't perform the action, this field is blank. This field is available in API version 35.0 and later.
`Display`	**Type** string **Properties** Nillable, Sort **Description** The full description of changes made in Setup. For example, if the `Action` field has a value of *`PermSetCreate`*, the `Display` field has a value like "Created permission set MAD: with user license Salesforce."
`Section`	**Type** string **Properties** Nillable, Sort **Description** The section in the Setup menu where the action occurred. For example, Manage Users or Company Profile.

Note: You can use SOQL joins to get the information you need more quickly. For example, running `SELECT CreatedBy.Name FROM SetupAuditTrail LIMIT 10` returns the first and last names of the last 10 people to make changes in Setup.

SetupEntityAccess

Represents the enabled setup entity access settings (such as for Apex classes) for the parent PermissionSet. This object is available in API version 25.0 and later.

To grant users access to an entity, associate the appropriate SetupEntityAccess record with a PermissionSet that's assigned to a user.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

As of Spring '20 and later, only users with "View Setup and Configuration" permission can access this object.

Fields

Field Name	Details
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the entity's parent PermissionSet.
`SetupEntityId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the entity for which access is enabled, such as an Apex class or Visualforce page.
`SetupEntityType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of setup entity for which access is enabled. Valid values are: • `ApexClass` for Apex classes • `ApexPage` for Visualforce pages • In API version 28.0 and later, `ConnectedApplication` for OAuth connected apps • In API version 31.0 and later, `CustomPermission` for custom permissions • In API version 28.0 and later, `ServiceProvider` for service providers • In API version 28.0 and later, `TabSet` for apps • In API version 48.0 and later, `CustomEntityDefinition` for Custom Settings and Custom Metadata Types

Usage

Because SetupEntityAccess is a child of the PermissionSet object, the usage is similar to other PermissionSet child objects like FieldPermissions and ObjectPermissions.

For example, the following code returns all permission sets that grant access to any setup entities for which access is enabled:

```
SELECT Id, ParentId, Parent.Name, SetupEntityId
FROM SetupEntityAccess
```

The following code returns permission sets that grant access only to Apex classes:

```
SELECT Id, ParentId, Parent.Name, SetupEntityId
FROM SetupEntityAccess
WHERE SetupEntityType='ApexClass'
```

The following code returns permission sets that grant access to any setup entities, and are not owned by a profile:

```
SELECT Id, ParentId, Parent.Name, SetupEntityId
FROM SetupEntityAccess
WHERE ParentId
IN (SELECT Id
   FROM PermissionSet
   WHERE isOwnedByProfile = false)
```

You may want to return only those permission sets that have access to a specific setup entity. To do this, query the parent object. For example, this code returns all permission sets that grant access to the `helloWorld` Apex class:

```
SELECT Id, Name,
   (SELECT Id, Parent.Name, Parent.Profile.Name
   FROM SetupEntityAccessItems)
FROM ApexClass
WHERE Name = 'helloWorld'
```

While it's possible to return permission sets that have access to a `ConnectedApplication`, `ServiceProvider`, or `TabSet` by `SetupEntityId`, it's not possible to return permission sets that have access to these `SetupEntityType` fields by any other AppMenuItem attribute, such as `Name` or `Description`. For example, to find out if a user has access to the Recruiting app, you'd run two queries. First, query to get the AppMenuItem ID:

```
SELECT Id, Name, Label
FROM AppMenuItem
WHERE Name = 'Recruiting'
```

Let's say the previous query returned the AppMenuItem ID 02uD0000000GIiMIAW. Using this ID, you can now run a query to find out if a user has access to the Recruiting app:

```
SELECT Id, SetupEntityId, SetupEntityType
FROM SetupEntityAccess
WHERE ParentId
IN
   (SELECT PermissionSetId
   FROM PermissionSetAssignment
   WHERE AssigneeId = '005D0000001QOzF')
AND (SetupEntityId = '02uD0000000GIiMIAW')
```

SEE ALSO:

- PermissionSet
- FieldPermissions
- ObjectPermissions
- ApexClass
- ApexPage

ShapeRepresentation

Contains information about the shape of an org. The shape of an org includes features, settings, licenses, and limits information. You can easily create scratch orgs based on a source org's shape. This object is available in API version 50.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`Description`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A free-form text field for you to enter a description of this org shape. This field has a maximum length of 255 characters.
`Edition`	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** The org edition of this org shape. Valid entries are Developer, Enterprise, Group, or Professional. This field is read-only.
`Features`	**Type** textarea **Properties** Nillable, Update **Description** Add-on features present in the org referred to by this org shape. This field is read-only.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date when the org shape was last referenced. This field is read-only.

Field	Details
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date when the org shape was last viewed. This field is read-only.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The alias for the org shape.
`Settings`	**Type** textarea **Properties** Nillable, Update **Description** Settings of the org referred to by this org shape. This field is read-only.
`Status`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Status of this org shape. You can use an org shape when it's Active. This field is read-only. Possible values are: • `Active` • `Error` • `InProgress` • `Inactive` • `New`

SharingRecordCollection

Represents a collection of records. This object is available in API version 51.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Record collections are limited to 100 items and 100 members for each record collection.

Fields

Field	Details
`Description`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The description of the record collection.
`GroupId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The group ID of the record collection.
`LastAdded`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when an item was last added to the record collection.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort

Field	Details
	Description The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (LastReferencedDate) but not viewed it.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the record collection.
`NumberOfRecords`	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** The number of records in the record collection. The limit is 100.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the record collection owner.

SharingRecordCollectionItem

Represents a single record in a collection of records. This object is available in API version 51.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Record collections are limited to 100 items for each record collection.

Fields

Field	Details
`CollectionId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the related record collection.
`Description`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The description of the record collection item.
`ItemId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the record collection item.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the record collection item.

SharingRecordCollectionMember

Represents a user with access to a collection of records. This object is available in API version 51.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Record collections are limited to 100 members for each record collection.

Fields

Field	Details
`CollectionId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the related record collection.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the user or group with access to the record collection.

Shift

Represents a shift for service resource scheduling. Available in API versions 46.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `upsert()`

Special Access Rules

Field Service must be enabled. Users must have Field Service permission.

Fields

Field	Details
`EndTime`	**Type** dateTime **Properties** Create, Filter, Sort, Update **Description** The date and time that the shift ends.

Field	Details
JobProfileId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The job profile associated with the shift. Available in API versions 47.0 and later.
Label	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The label that a shift is given.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time when the current user last viewed a related record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time when the current user last viewed this record.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The owner of the shift.
ServiceResourceId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the service resource the shift belongs to. Available in API versions 47.0 and later.

Field	Details
ServiceTerritoryId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the service territory the shift belongs to. Available in API versions 47.0 and later.
ShiftNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The number automatically given to the shift upon creation.
StartTime	**Type** dateTime **Properties** Create, Filter, Sort, Update **Description** The date and time that the shift starts.
Status	**Type** picklist **Properties** Create, Filter, Group, Sort, Update **Description** Describes the status of the shift. Users can create custom values. Default values are: • Tentative • Published • Confirmed
StatusCategory	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Describes the status of the shift using static values. This field is derived from Status using the mapping defined in setup. Possible values are: • Tentative • Published

Field	Details
	• `Confirmed`
`TimeSlotType`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Type of time slot for the shift. The same setup values as the `TimeSlot` field in the OperatingHours object. Possible values are: • `Normal` (default value) • `Extended`

Usage

Scheduling and dispatching service resources using shift data is not supported in API version 46.0, and is a pilot feature in API version 47.0.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ShiftFeed
Feed tracking is available for the object.

ShiftHistory
History is available for tracked fields of the object.

ShiftOwnerSharingRule
Sharing rules are available for the object.

ShiftShare
Sharing is available for the object.

ShiftHistory

Represents the history of changes made to tracked fields on a time sheet. Available in API versions 46.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Special Access Rules

Field Service must be enabled in your organization, and field tracking for shift fields must be configured.

Fields

Field	Details
DataType	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Data type of the field that was changed.
Field	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
NewValue	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
OldValue	**Type** anyType **Properties** Nillable, Sort **Description** The value of the field before it was changed.
ShiftId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the shift being tracked. The history is displayed on the detail page for this record.

Usage

Scheduling and dispatching service resources using shift data is not supported in API version 46.0.

ShiftOwnerSharingRule

Represents the rules for sharing a shift with user records other than the owner or anyone above the owner in the role hierarchy. Available in API versions 46.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service must be enabled.

Note: To enable access to this object for your org, contact Salesforce customer support. However, we recommend that you instead use Metadata API to programmatically update owner sharing rules because it triggers automatic sharing rule recalculation. The SharingRules Metadata API type is enabled for all orgs.

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface.

Field	Details
	Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group. A time sheet owned by a User in the source Group triggers the rule to give access.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.
`ServiceResourceAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of access granted to the target Group, or UserRole. The possible values are: • `Read` • `Edit` • `All`
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the User or Group being granted access.

Usage

Scheduling and dispatching service resources using shift data is not supported in API version 46.0.

ShiftShare

Represents a sharing entry on a field service shift. Available in API versions 46.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the user or group has to the shift. The possible values are: • `Read` • `Edit` • `All` (This value isn't valid for create or update calls.) Set to an access level that is at least equal to the organization's default shift access level.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The shift associated with the sharing entry.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The reason why this sharing entry exists. You can write to this field only when its value is omitted or set to `Manual` (default). Valid values include: • `Manual`—The User or Group has access because a user with "All" access manually shared the shift record.

Field	Details
	• `Owner`—The User is the owner of the shift. • `Rule`—The User or Group has access via a shift sharing rule. • `GuestRule`—The User or Group has access via a shift guest user sharing rule.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** (Read only) ID of the user or group that has access to the shift record.

Usage

Scheduling and dispatching service resources using shift data is not supported in API version 46.0.

ShiftStatus

Represents a shift, such as Tentative, Published, or Confirmed. Available in API versions 46.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Field Service must be enabled.

Fields

Field	Details
`ApiName`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** Uniquely identifies a picklist value so it can be retrieved without using an ID or master label.
`IsDefault`	**Type** boolean

Field	Details
	Properties Defaulted on create, Filter, Group, Sort **Description** Indicates whether this is the default shift status value (`true`) or not (`false`) in the picklist. Only one value can be the default value.
`MasterLabel`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Master label for this shift status value. This display value is the internal label that does not get translated. Limit: 255 characters.
`SortOrder`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Number used to sort this value in the shift status picklist. These numbers are not guaranteed to be sequential, as some previous shift status values might have been deleted.
`StatusCode`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Describes the status of the shift using static values. Possible values are: • `Tentative` • `Published` • `Confirmed`

Usage

Scheduling and dispatching service resources using shift data is not supported in API version 46.0.

Shipment

Represents the transport of inventory in field service or a shipment of order items in Order Management.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is only available in Salesforce Order Management orgs or if Field Service is enabled.

Fields

Field Name	Details
ActualDeliveryDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Date the product was delivered.
DeliveredToId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The person or entity the product was delivered to.
DeliveryMethodId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The delivery method used for the shipment. This field is available in API version 51.0 and later.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** Details not recorded in the provided fields
DestinationLocationId	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The place the product is to be delivered.
`ExpectedDeliveryDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Date the product is expected to be delivered.
`FulfillmentOrderId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The fulfillment order that the shipment belongs to. This field is available in API version 51.0 and later.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (`LastReferencedDate`) but not viewed it.
`OrderSummaryId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort

Field Name	Details
	Description The order summary associated with the shipment. This field is available in API version 51.0 and later.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The owner of the shipment.
Provider	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The company or person making the transfer.
ShipFromAddress	**Type** address **Properties** Filter, Nillable **Description** The place the product is coming from.
ShipFromCity	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The city of the address where the shipment originates.
ShipFromCountry	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The country of the address where the shipment originates.
ShipFromGeocodeAccuracy	**Type** picklist

Field Name	Details
	Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Accuracy level of the geocode for the address where the shipment originates. See Compound Field Considerations and Limitations for details on geolocation compound fields. Note: This field is available in the API only.
ShipFromLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with Longitude to specify the precise geolocation of the address where the shipment originates. Acceptable values are numbers between –90 and 90 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields. Note: This field is available in the API only.
ShipFromLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with Latitude to specify the precise geolocation of the address where the shipment originates. Acceptable values are numbers between –180 and 180 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields. Note: This field is available in the API only.
ShipFromPostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The postal code of the address where the shipment originates.
ShipFromState	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The state of the address where the shipment originates.
ShipFromStreet	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street of the address where the shipment originates.
ShipToAddress	**Type** address **Properties** Filter, Nillable **Description** The physical address where the shipment is delivered.
ShipToCity	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The city of the address where the shipment is delivered.
ShipToCountry	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The country of the address where the shipment is delivered.
ShipToGeocodeAccuracy	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Accuracy level of the geocode for the address where the shipment is delivered. See Compound Field Considerations and Limitations for details on geolocation compound fields.

Field Name	Details
	Note: This field is available in the API only.
ShipToLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with Longitude to specify the precise geolocation of the address where the shipment is delivered. Acceptable values are numbers between –90 and 90 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields. **Note:** This field is available in the API only.
ShipToLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with Latitude to specify the precise geolocation of the address where the shipment is delivered. Acceptable values are numbers between –180 and 180 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields. **Note:** This field is available in the API only.
ShipToName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The shipment recipient.
ShipToPostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The postal code of the address where the shipment is delivered.
ShipToState	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The state of the address where the shipment is delivered.
`ShipToStreet`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street of the address where the shipment is delivered.
`ShipmentNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** An auto-generated number identifying the shipment.
`SourceLocationId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The field service location where the shipment originates.
`Status`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The status of the shipment. The picklist includes the following values, which can be customized: • *`Shipped`*—The product is in transit. • *`Delivered`*—The product is at the source location.
`TotalItemsQuantity`	**Type** double **Properties** Filter, Nillable, Sort

Field Name	Details
	Description The total quantity of items included in the shipment. This value is calculated as the sum of the quantities of the shipment items in the shipment. This field is available in API version 51.0 and later.
`TrackingNumber`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Tracking number for the shipment.
`TrackingUrl`	**Type** url **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** URL of website used for tracking the shipment.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ShipmentFeed
Feed tracking is available for the object.

ShipmentHistory
History is available for tracked fields of the object.

ShipmentOwnerSharingRule
Sharing rules are available for the object.

ShipmentShare
Sharing is available for the object.

SEE ALSO:

ShipmentItem

ShipmentItem

Represents an order item included in a shipment. This object is available in API version 51.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is only available in Salesforce Order Management orgs or if Field Service is enabled.

Fields

Field	Details
`Description`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of the shipment item.
`ExpectedDeliveryDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Expected delivery date of the shipment that contains the shipment item.
`FulfillmentOrderLineItemId`	**Type** reference **Properties** Filter, Nillable, Sort **Description** The FulfillmentOrderLineItem (fulfillment order product) corresponding to the shipment item.
`OrderItemSummaryId`	**Type** reference **Properties** Filter, Nillable, Sort **Description** The OrderItemSummary (order product summary) corresponding to the shipment item.
`Product2Id`	**Type** reference

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The product represented by the shipment item.
`Quantity`	**Type** double **Properties** Create, Filter, Sort, Update **Description** The quantity of products represented by the shipment item.
`ShipmentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** (Master-Detail) The shipment that contains the shipment item.
`ShipmentItemNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** An auto-generated number identifying the shipment item.
`TrackingNumber`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The tracking number of the shipment that contains the shipment item.
`TrackingUrl`	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** The tracking URL of the shipment that contains the shipment item.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

ShipmentItemFeed
Feed tracking is available for the object.

ShipmentItemHistory
History is available for tracked fields of the object.

SEE ALSO:

Shipment

FulfillmentOrderLineItem

SignupRequest

Represents a request for a new signup. This object is available in API version 27.0 and later.

Note: You are limited to 20 signups per day. To make additional signups, log a case in the Partner Community.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`

Fields

Field Name	Details
`AuthCode`	**Type** string **Properties** Create, Filter, Group, Sort **Description** A one-time authorization code that can be exchanged for an OAuth access token and refresh token using standard Salesforce APIs. It's used with `ConnectedAppCallbackUrl` and `ConnectedAppConsumerKey`, when the specified connected app hasn't been configured with an X.509 certificate. The system provides this read-only field once the sign-up request has been processed. This field is available in API version 29.0 and later.
`Company`	**Type** string **Properties** Create, Filter, Group, Sort **Description** The name of the company requesting the trial sign-up.

Field Name	Details
ConnectedAppCallbackUrl	**Type** string **Properties** Create, Filter, Group, Sort **Description** When used with `ConnectedAppConsumerKey`, specifies a connected app that's approved automatically during the sign-up creation. This field is available in API version 28.0 and later.
ConnectedAppConsumerKey	**Type** string **Properties** Create, Filter, Group, Sort **Description** When used with `ConnectedAppCallbackUrl`, specifies a connected app that's approved automatically during the sign-up creation. This field is available in API version 28.0 and later.
Country	**Type** string **Properties** Create, Filter, Group, Sort **Description** The default value is the country of the requesting org. If you want to override the default, enter the two-character, upper-case ISO-3166 country code (Alpha-2 code). You can find a full list of these codes at several sites, such as: https://www.iso.org/obp/ui/#search. The language of the trial organization is auto-determined based on the value of this field.
CreatedOrgId	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The 15–character organization ID of the trial organization created. The system provides this read-only field once the sign-up request has been processed.
CreatedOrgInstance	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The server instance of the new trial organization, for example, "na8." This field is available in API version 29.0 and later.

Field Name	Details
Edition	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The Salesforce template that is used to create the trial organization. Possible values are `Partner Group`, `Professional`, `Partner Professional`, `Sales Enterprise`, `Professional TSO`, `Enterprise`, `Partner Enterprise`, `Service Professional`, `Enterprise TSO`, `Developer`, and `Partner Developer`. This field is available in API version 35.0 and later.
ErrorCode	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The error code if the sign-up request isn’t successful. The system provides this read-only field for support purposes.
FirstName	**Type** string **Properties** Create, Filter, Nillable, Sort **Description** The first name of the admin user for the trial sign-up.
LastName	**Type** string **Properties** Create, Filter, Group, Sort **Description** The last name of the admin user for the trial sign-up.
PreferredLanguage	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The language of the trial organization being created. Specify the language using a language code listed under Fully Supported Languages in Supported Languagesin Salesforce Help. For example, use *zh_CN* for simplified Chinese. The value you select overrides the language set by the locale. If you specify an invalid language, the organization defaults to the default

Field Name	Details
	language of the country. Likewise, if you specify a language that isn't supported by the Salesforce edition associated with your trial template, the trial organization defaults to the default language of the country. This field is available in API version 35.0 and later.
`ResolvedTemplateId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Populated during the sign-up request and for internal use by Salesforce. This field is available in API version 35.0 and later.
`ShouldConnectToEnvHub`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** When set to `true`, the trial organization is connected to the Environment Hub. The sign-up must take place in the hub master organization or a spoke organization. This field is available in API version 35.0 and later.
`SignupEmail`	**Type** email **Properties** Create, Filter, Group, Sort **Description** The email address of the admin user for the trial sign-up.
`SignupSource`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** A user-specified description of the trial sign-up, up to 60 characters in length. This field is available in API version 36.0 and later.
`Status`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Sort, Update

Field Name	Details
	Description The status of the request. Possible values are `New`, `In Progress`, `Error`, or `Success`. The default value is `New`.
`Subdomain`	**Type** string **Properties** Create, Filter, Group, Sort **Description** The My Domain name for the new trial organization, used in the org's login and application URLs. In Developer Edition orgs, your name must contain at least 3 characters and no more than 27 characters. In all other editions, it must be at least 3 characters and no more than 34 characters. It can include letters, numbers, and hyphens, but you can't start the name with a hyphen. If you don't choose a My Domain during sign-up, Salesforce assigns one for you based on your company name. If you don't like the one we set, you can change it. For details, see My Domain in Salesforce Help.
`SuppressSignupEmails`	**Type** boolean **Properties** Filter, Group, Nillable, Sort **Description** When set to `true`, no sign-up emails are sent when the trial organization is created. This field is used for the Proxy Signup feature, and is available in API version 29.0 and later.
`TemplateId`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** The 15–character ID of the Trialforce template that is the basis for the trial sign-up. Salesforce must approve the template. If you don't specify an edition, a template ID is required.
`TrialDays`	**Type** anyType **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** The duration of the trial sign-up in days. Must be equal to or less than the trial days for the approved Trialforce template. If not provided, it defaults to the trial duration specified for the Trialforce template.

Field Name	Details
TrialSourceOrgId	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The 15–character organization ID of the Trialforce Source Organization from which the Trialforce template was created.
Username	**Type** string **Properties** Create, Filter, Group, Sort **Description** The username of the admin user for the trial sign-up. It must follow the address convention specified in RFC822: www.w3.org/Protocols/rfc822/#z10

Usage

The Java class uses the REST API to create a SignupRequest object. It authenticates to the Trialforce Management Organization and then posts a request to the SignupRequest object.

Here are the variables to specify in this example.

- SERVER — The name of the host server for the Trialforce Management Organization (TMO), for example, "*yourInstance*.salesforce.com."
- USERNAME — The admin username for the TMO.
- PASSWORD — The concatenation of the admin password and the security token for the TMO. To get an email with the security token, from your personal settings in Salesforce select **Reset My Security Token** and click **Reset Security Token**.
- CLIENT_ID — From Setup in Salesforce, enter *Apps* in the Quick Find box, select **Apps**, and click **New** under Connected Apps. Enter values for the required fields (the Callback URL is required but can initially be set to any valid URL as it's not used), grant full access for the OAuth scopes in the "Selected OAuth Scopes" selector, and click **Save**. Then copy the value of "Consumer Key" and use it for this variable.
- CLIENT_SECRET — On the same page, click **Click to reveal**. Then copy the value of "Consumer Secret" and use it for this variable.

```
public class IsvSignupDriver {
    private static final String SERVER = server_name:port;
    private static final String USERNAME = tmo_username;
    private static final String PASSWORD = tmo_passwordsecurity_token;
    private static final String CLIENT_ID = consumer_key;
    private static final String CLIENT_SECRET = consumer_secret;

    private static SignupRequestInfo signupRequest = null;

    public static String createSignupRequest (SignupRequestInfo sr)
      throws JSONException, IOException {
       JSONObject createResponse = null;
```

```
    signupRequest = sr;
    JSONObject loginResponse = login(SERVER, USERNAME, PASSWORD);
    String instanceUrl = loginResponse.getString("instance_url");
    String accessToken = loginResponse.getString("access_token");
    createResponse = create(instanceUrl, accessToken);
    System.out.println("Created SignupRequest object: " + createResponse + "\n");
    return createResponse.toString();
}

/* Authenticates to the TMO using the required credentials */

private static JSONObject login(String server, String username, String password)
  throws ClientProtocolException, IOException, JSONException {
    String authEndPoint = server + "/services/oauth2/token";
    HttpClient httpclient = new DefaultHttpClient();
    try {
        HttpPost post = new HttpPost(authEndPoint);

        List<NameValuePair> params = new ArrayList<NameValuePair>();
        params.add(new BasicNameValuePair("grant_type", "password"));
        params.add(new BasicNameValuePair("client_id", CLIENT_ID));
        params.add(new BasicNameValuePair("client_secret", CLIENT_SECRET));
        params.add(new BasicNameValuePair("username", username));
        params.add(new BasicNameValuePair("password", password));
        post.setEntity(new UrlEncodedFormEntity(params, Consts.UTF_8));

        BasicResponseHandler handler = new BasicResponseHandler();
        String response = httpclient.execute(post, handler);
        return new JSONObject(response);
    } finally {
        httpclient.getConnectionManager().shutdown();
    }
}
/* Posts a request to the SignupRequest object */

private static JSONObject create(String instanceUrl, String accessToken)
  throws ClientProtocolException, IOException, JSONException {
    HttpClient httpClient = new DefaultHttpClient();
    try {
        HttpPost post = new HttpPost(instanceUrl +
          "/services/data/v27.0/sobjects/SignupRequest/");
            post.setHeader("Authorization", "Bearer " + accessToken);
            post.setHeader("Content-Type", "application/json");

            JSONObject requestBody = new JSONObject();
            requestBody.put("TemplateId", signupRequest.getTemplateID());
            requestBody.put("SignupEmail", signupRequest.getEmail());
            requestBody.put("username", signupRequest.getUsername());
            requestBody.put("Country", "US");
            requestBody.put("Company", signupRequest.getCompanyName());
            requestBody.put("lastName", signupRequest.getLastName());

            StringEntity entity = new StringEntity(requestBody.toString());
            post.setEntity(entity);
```

```
                BasicResponseHandler handler = new BasicResponseHandler();
                String response = httpClient.execute(post, handler);
                return new JSONObject(response);
        } finally {
            httpClient.getConnectionManager().shutdown();
        }
    }
}
```

Error Codes

If the sign-up fails, the system generates an error code that can help you identify the cause. This table shows the most important error codes.

Error Code	Description
`C-1007`	Duplicate username.
`C-1015`	Error while establishing the new org's My Domain (subdomain) settings. Contact Salesforce support for assistance.
`C-1016`	Error while configuring the OAuth connected app for Proxy Signup. Verify that your connected app has a valid consumer key, callback URL, and unexpired certificate (if applicable).
`C-1018`	Invalid subdomain value provided during signup.
`C-1019`	Subdomain in use. Choose a new subdomain value.
`C-1020`	Template not found. Either the template doesn't exist (or it was deleted).
`C-1033`	Template is the wrong version.
`C-9999`	Generic fatal error. Contact Salesforce Customer Support for assistance.
`S-1006`	Invalid email address (not in a proper email address format).
`S-1014`	Invalid or missing parameters during signup process. Possible solutions include: • Be sure to indicate a valid Callback URL. • If indicated, be sure to provide both a ConsumerKey and Callback URL.
`S-1018`	Invalid My Domain (subdomain) name. Select a name that doesn't: • Contain double hyphens • End in a hyphen • Include restricted words • Exceed 40 characters (33 for Developer Edition)
`S-1019`	My Domain (subdomain) already in use.
`S-1026`	Invalid namespace. Namespaces must begin with a letter, must not contain consecutive underscores, cannot be a restricted or reserved namespace, and must be 15 characters or fewer.
`T-0001`	Template ID not valid (not in the format 0TTxxxxxxxxxxxx).

Error Code	Description
T-0002	Template not found. Either the template doesn't exist (or it was deleted).
T-0003	Template not approved for use by Salesforce.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

SignupRequestFeed
Feed tracking is available for the object.

SignupRequestHistory
History is available for tracked fields of the object.

SignupRequestOwnerSharingRule
Sharing rules are available for the object.

SignupRequestShare
Sharing is available for the object.

Site

Represents a public website that is integrated with an org. This object is available in API version 16.0 and later.

To access this object, Salesforce Sites, Sites, or Site.com must be enabled for your organization.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

- Customer Portal users can't access this object.
- To view this object, you must have the "View Setup and Configuration" permission.

Fields

Field	Description
AdminId	**Type** reference **Properties** Filter, Group, Sort **Description** The site administrator designated as the contact for the site. This user receives site-related communications from site visitors and from Salesforce.

Field	Description
AnalyticsTrackingCode	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The tracking code associated with your site. This code can be used by services like Google Analytics to track page request data for your site.
ClickjackProtectionLevel	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Sets the clickjack protection level. The options are: • AllowAllFraming—Allow framing by any page (no protection) • SameOriginOnly—Allow framing by the same origin only (recommended) • NoFraming—Don't allow framing by any page (most protection) This field is available in API version 30.0 and later.
DailyBandwidthLimit	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The rolling 24-hour daily bandwidth limit for the sites in your organization.
DailyBandwidthUsed	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The current rolling 24-hour daily bandwidth usage for the sites in your organization.
DailyRequestTimeLimit	**Type** int **Properties** Filter, Group, Nillable, Sort

Field	Description
	Description The rolling 24-hour daily service request time limit for the sites in your organization. Service request time is calculated as the total server time in minutes required to generate pages for the site.
DailyRequestTimeUsed	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The current rolling 24-hour daily service request time for the sites in your organization.
Description	**Type** textarea **Properties** Filter, Nillable, Sort **Description** An optional description of the site.
GuestRecordDefaultOwnerId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** A user in the Salesforce org that is the default owner of records created by unauthenticated (guest) users.
GuestUserId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The site or Experience Cloud sites specific user that anonymous, unauthenticated users run as when interacting with the site.
MasterLabel	**Type** string **Properties** Filter, Group, Sort **Description** The name of the site as it appears in the user interface.

Field	Description
MonthlyPageViewsEntitlement	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of page views allowed for the current calendar month for the sites in your organization.
Name	**Type** string **Properties** Filter, Group, Sort **Description** The name used when referencing the site in the API.
OptionsAllowGuestPaymentsApi	**Type** boolean **Properties** Filter **Description** Indicates whether unauthenticated guest users can access the Payments API (true) or not (false). The default is false. This field is available in API version 49.0 and later.
OptionsAllowGuestSupportApi	**Type** boolean **Properties** Filter **Description** The option to enable unauthenticated users to access the Support API.
OptionsAllowHomePage	**Type** boolean **Properties** Filter **Description** The option to enable the standard page associated with the Home tab (/home/home.jsp).
OptionsAllowStandardAnswersPages	**Type** boolean

Field	Description
	Properties Filter **Description** The option to enable standard pages associated with an answers Experience Cloud site. If you want to use default Answers pages (such as AnswersHome), enable these pages.
OptionsAllowStandardIdeasPages	**Type** boolean **Properties** Filter **Description** The option to enable standard pages associated with an Ideas Experience Cloud site. If you want to use default Ideas pages (such as IdeasHome), enable these pages.
OptionsAllowStandardLookups	**Type** boolean **Properties** Filter **Description** The option to enable the standard lookup pages. These are the popup windows associated with lookup fields on Visualforce pages.
OptionsAllowStandardPortalPages	**Type** boolean **Properties** Filter **Description** The option to enable authenticated users to access the standard Salesforce pages.
OptionsAllowStandardSearch	**Type** boolean **Properties** Filter **Description** The option to enable the standard search pages. To allow public users to perform standard searches, enable these pages.
OptionsBrowserXssProtection	**Type** boolean

Field	Description
	Properties Filter **Description** The option to enable the browser's cross-site scripting protection.
`OptionsContentSniffingProtection`	**Type** boolean **Properties** Filter **Description** The option to enable content-sniffing protection.
`OptionsCspUpgradeInsecureRequests`	**Type** boolean **Properties** Filter **Description** The option to upgrade all requests to HTTPS (Content Security Policy : Upgrade Insecure Requests).
`OptionsEnableFeeds`	**Type** boolean **Properties** Filter **Description** The option that displays the Syndication Feeds related list, where you can create and manage syndication feeds for users on your public sites. This field is visible only if you have the feature enabled for your organization.
`OptionsHasStoredPathPrefix`	**Type** boolean **Properties** Filter **Description** Indicates whether this Experience Cloud site has a customized urlPathPrefix (`true`) or instead uses the Experience Cloud site's `UrlPathPrefix` plus `/s` (`false`). The default is `false`. In other sites, this field has no effect. This field is available in API version 50.0 and later.
`OptionsReferrerPolicyOriginWhenCrossOrigin`	**Type** boolean

Field	Description
	Properties Filter **Description** The option to enable referrer policy (origin-when-cross-origin).
`OptionsRequireHttps`	**Type** boolean **Properties** Filter **Description** When true, the site requires secure connections. When false, the site operates normally via insecure connections instead of redirecting to a secure connection.
`SiteType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Identifies whether the site is a Visualforce (Salesforce Sites) or a Site.com site. `SiteType` is available in API version 21.0 and later. In API version 26.0 and later, if Experience Cloud sites are enabled for your Salesforce org, the site could also be a Network Visualforce or Network Site.com site.
`Status`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The status for the site. For example, `Active` or `In Maintenance`.
`Subdomain`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The Salesforce domain that you registered for your site. For example, if your domain is *`SitesSubdomainName`*`.secure.force.com`, then *`SitesSubdomainName`* is the subdomain.
`TopLevelDomain`	**Type** url

Field	Description
	Properties Filter, Nillable **Description** The optional branded custom Web address that you registered with a third-party domain name registrar. The custom Web address acts as an alias to your Salesforce address. Beginning with API version 21.0, `TopLevelDomain` is no longer available. Instead, use the Domain and DomainSite objects.
`UrlPathPrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The unique Salesforce URL that the public uses to access this site.

Usage

Use this read-only object to query or retrieve information on your Salesforce site.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

SiteFeed
Feed tracking is available for the object.

SiteHistory
History is available for tracked fields of the object.

SiteDetail

Represents the details of a Salesforce site or Experience Cloud site. Available in API Version 38.0 and later.

Supported SOAP Calls

`describeSObjects()`, `query()`

Supported REST HTTP Methods

`GET`

Fields

Field	Details
`DurableId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ID of the Site object.
`IsRegistrationEnabled`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the site allows users to sign up.
`SecureUrl`	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** The URL of the website.

Note: SiteDetail fields are exposed in SOAP API version 45.0 and later. You can use Tooling API to query for SiteDetail fields in guest user mode in API version 44.0 and earlier. In API version 45.0 and later, use SOAP API to get this data in guest user mode. SiteDetail is still exposed in Tooling API to User Profiles with the ViewSetup permission.

SiteDomain

SiteDomain is a read-only object, and a one-to-many replacement for the Site.TopLevelDomain field. This object is available in API version 21.0, and has been deprecated as of API version 26.0. In API version 26.0 and later, use the Domain and DomainSite objects instead.

To access this object, Salesforce Sites, Sites, or Site.com must be enabled for your organization.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

- Customer Portal users can't access this object.

- To view this object, you must have the “View Setup and Configuration” permission.

Fields

Field	Description
`Domain`	**Type** url **Properties** Filter, Sort **Description** The branded custom Web address within the global namespace identified by this domain's type. In the Domain Name System (DNS) global namespace, this field is the custom Web address that you registered with a third-party domain name registrar. The custom Web address can be used to access the site of this domain.
`SiteId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the associated Site.
`DomainType`	**Type** picklist **Properties** Filter, Group, Sort, Nillable **Description** The global namespace that this custom Web address belongs to. This value is set to DNS for custom Web addresses in the global DNS. This field is available in version 24.0 of the API.

Usage

Use this read-only object to query the custom Web addresses that are associated with each website in your organization.

SiteHistory

Represents the history of changes to the values in the fields of a site. This object is generally available in API version 18.0 and later.

To access this object, Salesforce Sites must be enabled for your organization.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Special Access Rules

- Customer Portal users can't access this object.
- To view this object, you must have the "View Setup and Configuration" permission.

Fields

Field	Details
`DataType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Data type of the field that was changed.
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The last value of the field before it was changed.
`SiteId`	**Type** reference

Field	Details
	Properties Filter, Group, Sort **Description** The ID of the associated Site.

SiteIframeWhitelistUrl

Represents a list of external domains that you allow to frame your Salesforce site or Experience Cloud site pages. This object is available in API version 44.0 and later.

Important: Where possible, we changed noninclusive terms to align with our company value of Equality. Because changing terms in our code can break current implementations, we maintained this object's name.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- Customer Portal users can't access this object.
- To view this object, you must have the "View Setup and Configuration" permission.

Fields

Field Name	Details
`SiteId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the site to include in the inline frame.
`Url`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The domain allowed to frame your Salesforce site or Experience Cloud site page. Accepts these formats: example, example.com, *example.com, and http://example.com.

Skill

Represents a category or group that Chat users or field service resources can be assigned to. This object is available in API version 24.0 and later.

Note: For information about WDC skills on a user's profile, see the ProfileSkill topic.

Supported Calls

`create()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** The description of the skill.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`Language`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update

Field Name	Details
	Description The language of the skill.
`LastViewedDate`	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed the skill.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the skill.

Usage

Chat

Use this object to assign Chat users to groups based on their abilities. The skills associated with a LiveChatButton determine which agents receive chat requests that come in through that button.

Field Service

Use this object to track certifications and areas of expertise in your workforce. After you create a skill, you can:

- Assign it to a service resource via the Skills related list on the resource's detail page. When you assign a skill to a service resource, you can specify their skill level and the duration of the skill.
- Add it as a required skill via the Skill Requirements related list on any work type, work order, or work order line item. When you add a required skill to a work record, you can specify the skill level.

SkillProfile

Represents a join between Skill and Profile. This object is available in API version 24.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `update()`, `retrieve()`

Fields

Field Name	Details
ProfileId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the profile.
SkillId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the skill.

Usage

Use this object to assign specific skills to specific profiles.

SkillRequirement

Represents a skill that is required to complete a particular task in Field Service and Lightning Scheduler. Skill requirements can be added to work types, work orders, and work order line items in Field Service and Lightning Scheduler. This object is available in API version 38.0 and later. You also can add skill requirements to work items in Omni-Channel skills-based routing using API version 42.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

If you want to use SkillRequirement for Field Service use cases, then Field Service must be enabled.

If you want to use SkillRequirement only for Omni-Channel skills-based routing use cases, then you don't need Field Service to be enabled.

Fields

Field Name	Details
`IsAdditionalSkill`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates that a skill is additional. After a designated timeout period, a skill marked as additional is dropped from Omni-Channel routing. The case is then routed to the best-matched agent even if they don't have all the skills.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`RelatedRecordId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The record that the skill is required for. The related record can be a work order, work order line item, work type, or pending service routing record.
`SkillId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The skill that is required.

Field Name	Details
`SkillLevel`	**Type** double **Properties** Create, Defaulted on create, Filter, Nillable, Sort, Update **Description** The level of the skill required. Skill levels can range from zero to 99.99. Depending on your business needs, you might want the skill level to reflect years of experience, certification levels, or license classes.
`SkillNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** An auto-generated number identifying the skill requirement.
`SkillPriority`	**Type** int **Properties** Aggregatable, Create, Filter, Group, Nillable, Sort, Update **Description** For additional skills, specify the order in which skills are dropped if after the specified timeout no agent with that skill is available. Higher priority-value skills are dropped first. Lower priority-value skills, for example 0, are dropped last. Skills with the same priority value are dropped as a group. You can set skill priority using skills-based routing rules or Apex code.

Usage

Skill requirements help dispatchers assign work orders to service resources with the proper expertise. You can still assign a work order, work order line item, or related service appointment to a service resource that does *not* possess the specified skills, so skill requirements serve more as a suggestion than a rule.

Note: If you're using the Field Service managed package, use matching rules to ensure that appointments are only assigned to service resources who possess the skills listed on the parent work order.

If many of your work orders require the same skills, add skill requirements to work types to save time and keep your processes consistent. When you add a skill requirement to a work type, work orders and work order line items that use that type automatically inherit the skill requirement. For example, if all annual maintenance visits for your Classic Refrigerator product require a Refrigerator Maintenance skill level of at least 50, add that skill requirement to the Annual Maintenance Visit work type. When you create a work order for a customer's annual fridge maintenance, applying that work type adds the skill requirement as well.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

SkillRequirementFeed
Feed tracking is available for the object.

SkillRequirementHistory
History is available for tracked fields of the object.

SkillUser

Represents a join between Skill and User. This object is available in API version 24.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `update()`, `query()`, `retrieve()`

Fields

Field Name	Details
`SkillId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the skill.
`UserId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the user.

Usage

Use this object to assign specific skills to specific users.

SlaProcess

Represents an entitlement process associated with an Entitlement. This object is available in API version 19.0 and later.

An entitlement process is a timeline that includes all the steps (MilestoneType records) that your support team must complete to resolve cases. Each process includes the logic necessary to determine how to enforce the correct service level for your customers.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`, `search()`, `describeLayout()`

Special Access Rules

As of Summer '20 and later, only Salesforce admin users, users with access to the Case, Entitlement, or Work Order objects, and users with the View Setup and Configuration permission can access this object.

Fields

Field	Details
`BusinessHoursId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Required. ID of the BusinessHours associated with the entitlement. Must be a valid business hours ID.
`Description`	**Type** textarea **Properties** Filter, Nillable **Description** A description of the entitlement process.
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the entitlement process is active (`true`) or not (`false`).
`IsVersionDefault`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field	Details
	Description Indicates whether the entitlement process is the default version (`true`) or not (`false`). This field is available in API version 28.0 and later in organizations that have entitlement versioning enabled.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the SlaProcess was last viewed.
`Name`	**Type** string **Properties** Filter, idLookup **Description** The name of the entitlement process.
`NameNorm`	**Type** string **Properties** Filter, Group, Sort **Description** The read-only value for the unique name of the entitlement process or the entitlement process version. If entitlement versioning is enabled, this value is automatically generated for each version of an entitlement process in this form: *`process name`*+_v + *`x`*, where *`x`* is the version number (for example, "gold_support_v2"). If entitlement versioning isn't enabled, this value is the same as `Name`. This field is available in API version 28.0 and later.
`SObjectType`	**Type** picklist **Properties** Restricted picklist, Filter, Group, Sort **Description** The type of records that the entitlement process can run on. Its values are: • *`Case`* • *`Work Order`*

Field	Details
	An entitlement process runs only on records that match its type. For example, a Case entitlement process that's applied to an entitlement runs only on cases associated with the entitlement, not on work orders. As a best practice, therefore, manage customers' work orders and cases on separate entitlements. The field label in the user interface is Entitlement Process Type.
`StartDateField`	**Type** picklist **Properties** Filter, Restricted picklist **Description** The criteria for cases to enter the entitlement process. Cases can enter the process based on: • The creation date on a case • A custom date/time field on a case
`VersionMaster`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Identifies the sequence of versions to which this entitlement process belongs. This field's contents can be any value as long as it is identical among all versions of the entitlement process. This field is available in API version 28.0 and later in organizations that have entitlement versioning enabled.
`VersionNotes`	**Type** textarea **Properties** Filter, Group, Nillable, Sort **Description** The description of the entitlement process version. This field is available in API version 28.0 and later in organizations that have entitlement versioning enabled.
`VersionNumber`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The version number of the entitlement process. Must be 1 or greater.

Field	Details
	This field is available in API version 28.0 and later in organizations that have entitlement versioning enabled.

Usage

Use this object to query entitlement processes on entitlements.

SEE ALSO:

- Entitlement
- MilestoneType
- CaseMilestone

Snippet

Represents a snippet, which is a container for rich text that can be reused across Pardot emails and email templates. This object is available in API version 47.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Snippets are available in Pardot accounts with the Sales, CRM, or Service permission set license.

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** The description of the snippet. Limited to 32 KB.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update

Field	Details
	Description Required. This field value is unique to your org and is required for a Snippet to be resolved in marketing content. Label is **API Name**.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. The name of the snippet.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The type of content a snippet includes. Allowable values are: Date, Image, Link, Text. This field is for organizational purposes.
`Value`	**Type** textarea **Properties** Create, Nillable, Update **Description** The body content of a snippet. This field can contain plain or rich text. The value of a snippet is resolved when a marketing email is sent. The field does not support emojis, HTML, or image files.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

SnippetFeed
Feed tracking is available for the object.

SnippetAssignment

Represents a relationship between a snippet and a campaign. Assignments are required to use snippet content in Pardot emails and email templates. A snippet can be assigned to more than one campaign. This object is available in API version 47.0 and later.

Supported Calls

create( ), delete( ), describeLayout( ), describeSObjects( ), getDeleted( ), getUpdated( ), query( ), retrieve( )

Special Access Rules

Snippets are available in Pardot accounts with the Sales, CRM, or Service permission set license.

Fields

Field	Details
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the parent object
`SnippetId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the related snippet record

SocialPersona

Represents a snapshot of a contact's profile on a social network such as Facebook or Twitter. This object is available in API version 22.0 and later.

Supported Calls

create(), delete(), describeLayout(), describeSObjects(), getDeleted(), getUpdated(), query(), retrieve(), search(), undelete(), update(), upsert()

Fields

Field Name	Details
AreWeFollowing	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Specifies whether a Salesforce social account is following the social persona or not.
AuthorLabels	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Comma-separated list of author type tags.
AvatarUrl	**Type** string **Properties** Nillable **Description** Retrieves the user's social network avatar. It's a read-only field and you can't specify or update its value.
Bio	**Type** textarea **Properties** Create, Nillable, Update **Description** Biography of the social persona.
ExternalId	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description ID of the social persona on the social network.
ExternalPictureURL	**Type** url **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** URL to the picture of the social persona on the social network.
Followers	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Number of followers that the social persona has.
Following	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Number of people that the social persona is following.
InfluencerScore	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Radian6 score describing the influence of the social persona. No longer used.
IsBlacklisted	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Specifies whether the social persona is blacklisted or not.
IsDefault	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field Name	Details
	Description Specifies whether the social persona supplies the default avatar image that's displayed on the contact or account.
IsFollowingUs	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Specifies whether the social persona is following a Salesforce social account or not.
IsVerified	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Specifies whether the social persona is verified or not.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date and time when the social persona was last referenced.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date and time when the social persona was last viewed.
ListedCount	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Radian6 field. No longer used.
MediaProvider	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** Social network of the social persona.
MediaType	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Social network type of the social persona.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Name of the social persona.
NumberOfFriends	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Number of friends that the social persona has.
NumberOfTweets	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Number of tweets made by the social persona.
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the contact parent record for the social persona.
ProfileType	**Type** picklist

Field Name	Details
	Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Type of profile. Values are: • `Person` • `Page`
`ProfileUrl`	**Type** url **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** URL for the profile.
`Provider`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Social network, such as Facebook or Twitter, of the social persona.
`R6SourceId`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the social persona in Social Studio.
`RealName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Real name of the social persona.
`SourceApp`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** Salesforce product that created the social persona.

Field Name	Details
`TopicType`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Type of topic, such as keyword or managed.

Usage

The fields on a SocialPersona object don't provide real-time data. They provide a snapshot of information from the last time Salesforce collected a post from the social persona. Many of the Radian6-related fields are no longer accurate or used.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

SocialPersonaHistory (API version 26.0)
History is available for tracked fields of the object.

SocialPost

Represents a snapshot of a post on a social network such as a Facebook or Twitter. This object is available in API version 23.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`AnalyzerScore`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Score set on the social post in Social Studio.
`AssignedTo`	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort **Description** User in Social Studio that the social post is assigned to.
AttachmentType	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Type of the first attachment on the social post. Values are: • APPLICATION • AUDIO • IMAGE • LINK • TEXT • UNKNOWN • VIDEO
AttachmentUrl	**Type** url **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** URL for the first attachment on the social post.
Classification	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Classification for the social post, such as inquiry or customer case.
CommentCount	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Number of comments on the social post.

Field Name	Details
Content	**Type** textarea **Properties** Create, Nillable, Update **Description** Body of the social post.
DeletedById	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** If the social post is deleted, ID of the person who deleted the social post.
EngagementLevel	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Engagement level of the social post, such as reviewed or resolved.
ExternalPostId	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the social post in its social network.
Handle	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Handle of the person who posted the social post.
HarvestDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Date and time when Social Studio collected the social post.

Field Name	Details
Headline	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Headline of the social post.
HiddenById	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** If the social post is hidden, ID of the person who hid it.
InboundLinkCount	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Number of links on the inbound social post.
IsOutbound	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Specifies whether the social post is outbound or not.
KeywordGroupName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Radian6 field that is no longer used.
Language	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Language of the social post.

Field Name	Details
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date when the social post was last referenced.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date when the social post was last viewed.
`LikedBy`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the managed social account in the social network that liked the social post.
`LikesAndVotes`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Radian6 number of likes and votes on the social post.
`MediaProvider`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Social network of the social post.
`MediaType`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Type of social network of the social post.

Field Name	Details
MessageType	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Type of message. Values are: • Comment—Facebook comment • Direct—Twitter direct message • Post—Facebook post • Private—Facebook private message • Reply—Twitter or Facebook reply • Retweet—Twitter retweet • Tweet—Twitter tweet
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Name of the social post.
Notes	**Type** textarea **Properties** Create, Nillable, Update **Description** Notes added by Social Hub actions for the social post.
OutboundSocialAccountId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the social account used for outbound social posts.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner of the social post.

Field Name	Details
ParentId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the parent record of the social post, for example, the ID of a case.
PersonaId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the social persona who made the post.
PostPriority	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Priority of the social post set in Social Studio.
PostTags	**Type** textarea **Properties** Create, Nillable, Update **Description** Comma-separated list of tags on the social post.
PostUrl	**Type** url **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** URL for the social post.
Posted	**Type** dateTime **Properties** Create, Defaulted on create, Filter, Sort, Update **Description** Date and time when the social post was made.

Field Name	Details
Provider	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Social network of the social post.
R6PostId	**Type** string **Properties** Create, Filter, Group, idLookup, Nillable, Sort, Update **Description** Unique ID of the post in Social Studio.
R6SourceId	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the author in Social Studio.
R6TopicId	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID for either the topic profile or the managed account in Social Studio.
Recipient	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the recipient of the social post in Social Studio.
RecipientType	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Type of the recipient of the social post, such as a person.

Field Name	Details
ReplyToId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** Dynamically generated from replyToExternalPostId in Social Studio.
ResponseContextExternalId	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** External ID, such as a conversation ID, author ID, or post ID, for the item you're responding to.
ReviewScale	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Review scale for the social post.
ReviewScore	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Review score for the social post.
ReviewedStatus	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Status of the social post review.
Sentiment	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update

Field Name	Details
	Description Sentiment of the social post. Values are: • Negative • Neutral • Positive • SomewhatNegative • SomewhatPositive
Shares	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Number of times the social post has been shared.
SourceTags	**Type** textarea **Properties** Create, Nillable, Update **Description** Comma-separated list of author type tags.
SpamRating	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Spam rating of the social post. Values are: • NotSpam • Spam
Status	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Status of the social post. Values are: • DELETED • FAILED • HIDDEN

Field Name	Details
	• `PENDING` • `PENDING_APPROVAL` • `RECALL_APPROVAL` • `REJECTED_APPROVAL` • `REPLIED` • `SENT` • `UNKNOWN`
`StatusMessage`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Status message for the social post.
`ThreadSize`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Radian6 field. No longer used.
`TopicProfileName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Name of the topic profile for the social post in Social Studio.
`TopicType`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Type of topic. Values are: • `Keyword` • `Managed`
`TruncatedContent`	**Type** string

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** Truncated content of the social post.
`UniqueCommentors`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Number of unique people who commented on the social post.
`ViewCount`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Number of times the social post was viewed.
`WhoId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Polymorphic ID of a person such as a lead or a contact.

Usage

The fields on a SocialPost object don't provide real-time data. They provide a snapshot of information from the last time Salesforce collected the post from the social network. Many of the Radian6-related fields are no longer accurate or used.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

SocialPostFeed (API version 26.0)
Feed tracking is available for the object.

SocialPostHistory (API version 26.0)
History is available for tracked fields of the object.

SocialPostOwnerSharingRule
Sharing rules are available for the object.

SocialPostShare
Sharing is available for the object.

Solution

Represents a detailed description of a customer issue and the resolution of that issue.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`IsHtml`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the Solution is an HTML solution (`true`) or not (`false`).
`IsOutOfDate`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Read-only field that indicates whether a solution master has been updated since the translated version was created (`true`) or not (`false`). Note that this field does not appear in the page layout of master solutions.
`IsPublished`	**Type** boolean

Field	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the Solution has been published (`true`) or not (`false`). A solution's published state does not affect how it can be used, or whether you can query, update, or delete it. Label is **Public**. Note: Prior to Spring '14, the label was **Visible in Self-Service Portal**.
`IsPublishedInPublicKb`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the Solution has been published as a Public Solution (`true`) or not (`false`). Label is **Visible in Public Knowledge Base**. This field only applies to solutions, not articles in the public knowledge base.
`IsReviewed`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the Solution has been reviewed (`true`) or not (`false`). This flag can only be set indirectly via the `Status` picklist. Each predefined `Status` value implies an `IsReviewed` value. Label is **Reviewed**.
`LastReferencedDate`	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
`LastViewedDate`	**Type** datetime **Properties** Filter, Nillable, Sort

Field	Details
	Description The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (`LastReferencedDate`) but not viewed it.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the User who owns the Solution.
`ParentId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Update **Description** ID of the master solution, if this is the translation of a master solution.
`RecordTypeId`	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the RecordType to which the Solution is associated.
`SolutionLanguage`	**Type** picklist **Properties** Create, Filter, Restricted picklist, Update **Description** The language that the solution is written in, such as `French` or `Chinese (Traditional)`.
`SolutionName`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. If a client application creates a new Solution and a value for this field is unspecified, a hyphen (-), the default value for this field, is used. Limit: 255 characters. Label is **Title**.

Field	Details
SolutionNote	**Type** textarea **Properties** Create, Nillable, Update **Description** The details of the Solution record. Limit: 32,000 characters. Label is **Solution Details**. Note: If you have HTML Solutions enabled, any HTML tags used in this field are verified before the object is created or updated. If invalid HTML is entered, an error is thrown. Any JavaScript used in this field is removed before the object is created or updated.
SolutionNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** An identifying number that is assigned automatically when a solution is created. It can't be set directly, and it can't be modified.
Status	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Required. The status of the solution. Directly controls the `IsReviewed` value. To obtain the status values in the picklist, a client application can query the SolutionStatus.
TimesUsed	**Type** int **Properties** Filter, Group, Sort **Description** Number of times this solution has been used. Label is **Num Related Case**.

Usage

Use this object to manage your organization's solutions. Client applications can create, update, delete, and query Attachment records associated with a solution.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

SolutionFeed (API version 18.0)
: Feed tracking is available for the object.

SolutionHistory
: History is available for tracked fields of the object.

SEE ALSO:

CategoryData

CategoryNode

SolutionStatus

Represents the status of a Solution, such as Draft, Reviewed, and so on.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`ApiName`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** Uniquely identifies a picklist value so it can be retrieved without using an id or master label.
`IsDefault`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this is the default solution status value (`true`) or not (`false`) in the picklist. Only one value can be the default value.
`IsReviewed`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field	Details
	Description Indicates whether this solution status value represents a reviewed Solution (`true`) or not (`false`). Multiple solution status values can represent a reviewed Solution.
`MasterLabel`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Master label for this solution status value. This display value is the internal label that does not get translated.
`SortOrder`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Number used to sort this value in the solution status picklist. These numbers are not guaranteed to be sequential, as some previous solution status values might have been deleted.

Usage

This object represents a value in the solution status picklist. The solution status picklist provides additional information about the status of a Solution, such as whether a given status value represents a reviewed or unreviewed solution. Your client application can query this object to retrieve the set of values in the solution status picklist, and then use that information while processing Solution objects to determine more information about a given solution. For example, the application could test whether a given case has been reviewed or not based on its `Status` value and the value of the `IsReviewed` property in the associated SolutionStatus record.

SEE ALSO:

Solution

SolutionTag

Associates a word or short phrase with a Solution.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ItemId`	**Type** reference **Properties** Create, Filter **Description** ID of the tagged item.
`Name`	**Type** string **Properties** Create, Filter **Description** Name of the tag. If this value does not already exist, a new TagDefinition is created and becomes the parent of this Tag object. Otherwise, a TagDefinition with the same name becomes the parent of this Tag object. Parent relationships are created automatically.
`TagDefinitionId`	**Type** reference **Properties** Filter **Description** ID of the parent TagDefinition object that owns the tag.
`Type`	**Type** picklist **Properties** Create, Filter, Restricted picklist **Description** Defines the visibility of a tag. Valid values: • `Public`—The tag can be viewed and manipulated by all users in an organization. • `Personal`—The tag can be viewed or manipulated only by a user with a matching `OwnerId`.

Usage

SolutionTag stores the relationship between its parent TagDefinition and the Solution being tagged. Tag objects act as metadata, allowing users to describe and organize their data.

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

SOSDeployment

Represents the general settings for deploying SOS video call capability in a native mobile application. This object is available in API version 34.0 and later.

Supported Calls

`create()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`Language`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the deployment.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update

Field Name	Details
	Description The name of the deployment.
OptionsIsBackwardFacingCameraEnabled	**Type** boolean **Properties** Create, Filter, Update **Description** Determines whether customers can use the backwards-facing camera on their mobile devices to talk to SOS agents.
OptionsIsEnabled	**Type** boolean **Properties** Create, Filter, Update **Description** Determines whether the deployment is enabled for customers to request new SOS video calls.
OptionsIsVoiceOnlyMode	**Type** boolean **Properties** Create, Filter, Update **Description** Determines whether video functionality is disabled for customers, making it so customers can only talk to SOS agents using only audio.
QueueId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the queue that's associated with the SOS deployment.

Usage

Use this object to query and manage SOS deployments.

SOSSession

This object is automatically created for each SOS session and stores information about the session. This object is available in API versions 34.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`AppVersion`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The version of the customer's mobile application in which SOS is implemented.
`CaseId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the case that's associated with the SOS session.
`ContactId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the contact that's associated with the SOS session.
`DeploymentId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the SOS deployment that the SOS session originated from.

Field Name	Details
EndTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The time that the SOS session ended.
IpAddress	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** To protect the customer's privacy, this field is now blank.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the session record was last referenced by a user.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the session record was last viewed.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** The name of the session.
OpentokSession	**Type** encryptedstring **Properties** Create, Nillable, Update **Description** The ID of the OpenTok session that's associated with the SOS video call.

Field Name	Details
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the session record’s owner.
SessionDuration	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The amount of time that the SOS session lasted.
SessionRecordingUrl	**Type** url **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The URL where the SOS session recording is stored.
SosVersion	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The version of SOS that was used in your organization’s mobile application when this session occurred.
StartTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The time that the SOS session began.
SystemInfo	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description Information about the customer's mobile device from which the SOS call originated, such as the device's operating system.
`WaitDuration`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The amount of time the customer waited before an agent accepted the SOS session and the call began.

Usage

Use this object to query and manage SOS session records.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

SOSSessionFeed
Feed tracking is available for the object.

SOSSessionHistory
History is available for tracked fields of the object.

SOSSessionOwnerSharingRule
Sharing rules are available for the object.

SOSSessionShare
Sharing is available for the object.

SOSSessionActivity

Captures information about specific events that occur during an SOS video call, such as when an SOS call begins or ends. This object is available in API version 34.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`ActivityTime`	**Type** dateTime **Properties** Create, Filter, Sort **Description** The time at which the activity occurred.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, idLookup, Filter, Sort **Description** The name of the activity.
`SessionId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the SOS session that's associated with the event.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The kind of activity that occurred.

Usage

Use this object to query and manage SOS session activities.

Stamp

Represents a User Specialty. This object is available in API version 39.0 and later.

Create User Specialty labels. Specialties can be any term you want, up to 50 characters, including spaces and underscores.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Description
Description	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Use this field to describe what the user specialty means and how it applies to a user. You have a 255 character maximum including spaces and underscores.
MasterLabel	**Type** string **Properties** Filter, Group, Sort **Description** The User Specialty label that appears under the user's profile picture. You can create any label you want as long as it's within the 50 character maximum, including spaces and underscores.
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** The id of the org or network.

StampAssignment

Represents assignment of a User Specialty to a user. This object is available in API version 39.0 and later.

Assign a User Specialty to users. This label appears beneath their profile photo.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`StampId`	**Type** reference **Properties** Filter, Group, Sort **Description** The unique id generated when creating a user specialty.
`SubjectId`	**Type** reference **Properties** Filter, Group, Sort **Description** The id for the user getting the User Specialty label.

StaticResource

Represents a static resource that can be used in Visualforce markup.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Fields

Field	Details
`Body`	**Type** base64 **Properties** Create, Nillable, Update **Description** Required. Encoded file data.
`BodyLength`	**Type** int **Properties** Filter, Group, Sort

Field	Details
	Description Size of the file (in bytes).
`CacheControl`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The sharing policy for the static resource when cached. The cache control can have one of the following values: • *`Private`* specifies that the static resource data cached on the Salesforce server shouldn't be shared with other users. The static resource is stored in cache only for the current user's session. • *`Public`* specifies that the static resource data cached on the Salesforce server be shared with other users in your organization for faster load times. For API users, the resource is accessible to all internet traffic.
`ContentType`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Type of content. Label is **Mime Type**. Limit: 120 characters.
`Description`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Text description of the static resource. Limit: 255 characters.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. Name of the static resource.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix. This field can't be accessed unless the logged-in user has the Customize Application permission.

Usage

Use static resources to upload content that you can reference in Visualforce markup, including archives (such as .zip and .jar files), images, stylesheets, JavaScript, and other files. Using a static resource is preferable to uploading a file to the Documents tab because:

- You can package a collection of related files into a directory hierarchy and upload that hierarchy as a .zip or .jar archive.
- You can reference a static resource in page markup by name using the `$Resource` global variable instead of hard-coding document IDs.

Encoded Data

The API sends and receives the binary file data encoded as a base64 data type. Prior to creating a record, clients must encode the binary file data as base64. Upon receiving an API response, clients must decode the base64 data to binary (this conversion is usually handled for you by the SOAP client).

Maximum Static Resource Size

You can create or update static resources to a maximum size of 5 MB. An organization can have up to 250 MB of static resources, total.

SEE ALSO:

ApexComponent

ApexPage

Developer Guide: Visualforce Developer Guide

StoreIntegratedService

Represents an association between an integration and a store. This object is available in API version 49.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

The StoreIntegratedService object is available only if the B2B Commerce on Lightning Experience license is enabled.

Fields

Field	Details

`Integration`	**Type**
	picklist
	Properties
	Create, Filter, Group, Restricted picklist, Sort, Update
	Description
	Required. The integration ID.
	Possible values are:
	• If the integration is a RegisteredExternalService:
	  – The ID of the RegisteredExternalService OR
	  – [ServiceProviderType]__[DeveloperName]
	    • ServiceProviderType: Price, Inventory, Tax, or Shipment
	    • DeveloperName of RegisteredExternalService
	• If the integration is a PaymentGateway:
	  – The ID of the PaymentGateway
	• If the integration is a Flow:
	  – [ServiceProviderType]__[NamespacePrefix]__[ApiName]
	  – If NamespacePrefix is null, it’s [ServiceProviderType]__[ApiName]
	    • ServiceProviderType: Flow
	    • ApiName and NamespacePrefix of FlowDefinitionView
	• If the integration is the Salesforce Standard pricing:
	  – [ServiceProviderType]__B2B_STOREFRONT__StandardPricing
	    • ServiceProviderType: Price

Field	Details
ServiceProviderType	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. The type of integration service provider. Possible values are: • Flow • Inventory • Payment • Price • Shipment • Tax
StoreId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Required. The unique ID for the store.

StreamingChannel

Represents a channel that is the basis for notifying listeners of generic Streaming API events. This object is available in API version 29.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

- This object is available only if Streaming API is enabled for your org.
- Users with the Create permission can create this record.
- You can create a permission set and grant users read and create access to all streaming channels in the org. This access isn't for a specific channel, like with user sharing.
- You can apply user sharing to StreamingChannel. You can restrict access to receiving or sending events on a channel by sharing channels with specific users or groups. Channels shared with public read-only or read-write access send events only to clients

subscribed to the channel that also are using a user session associated with the set of shared users or groups. Only users with read-write access to a shared channel can generate events on the channel, or modify the actual StreamingChannel record.

Fields

Field	Details
`Description`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of the StreamingChannel. Limit: 255 characters. **Label:** Description
`IsDynamic`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** `true` if the channel gets dynamically created on subscribe if necessary, `false` otherwise.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (`LastReferencedDate`) but not viewed it.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update

Field	Details
	Description Required. Descriptive name of the streaming channel. Limit: 80 characters, alphanumeric and “_”, “/” characters only. Must start with “/u/”. This value identifies the channel and must be unique. **Label:** Streaming Channel Name
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the owner of the streaming channel. **Label:** Owner Name

Dynamic Streaming Channel

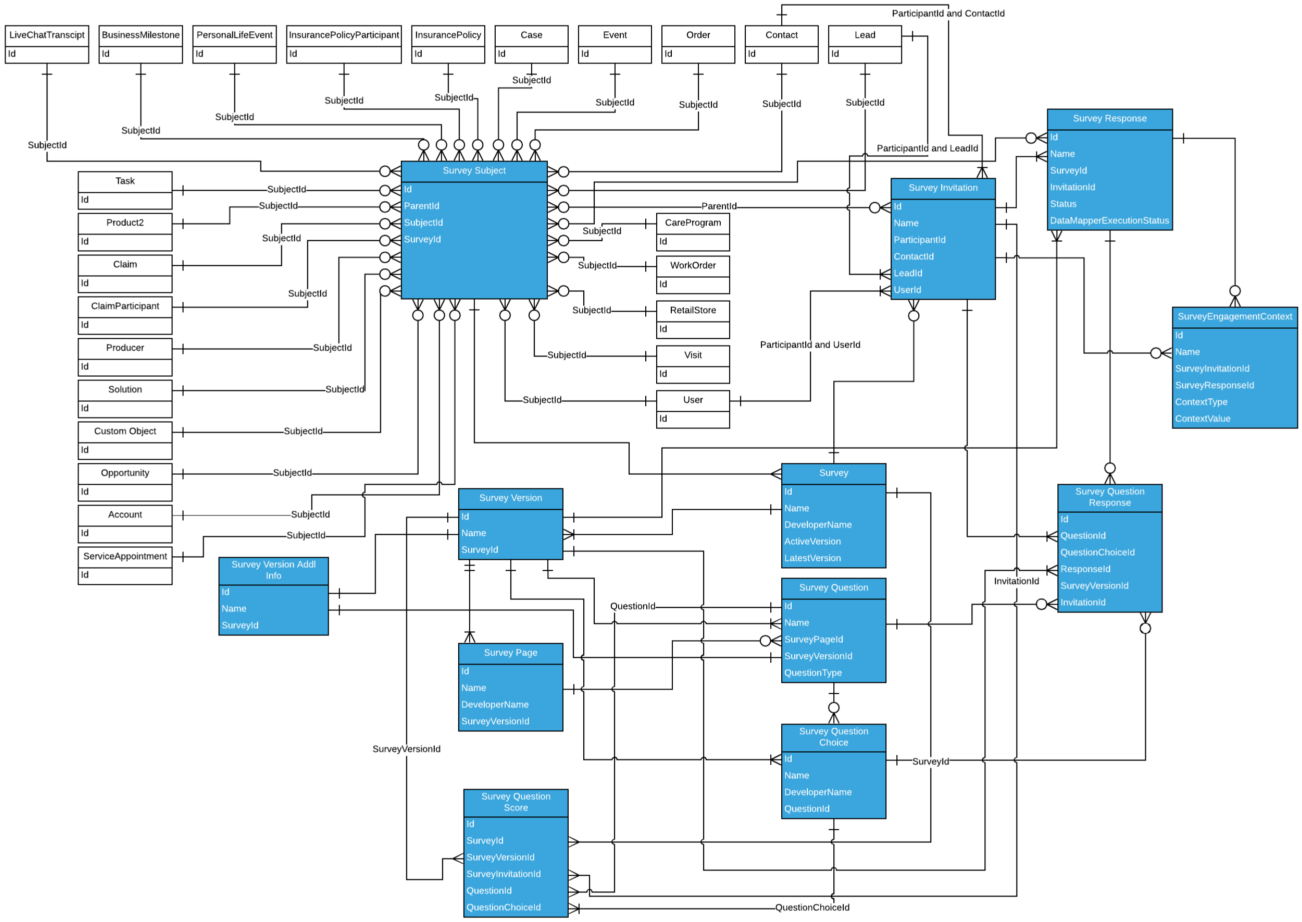
Streaming API generic streaming supports dynamic streaming channel creation, which creates a StreamingChannel when a client first subscribes to the channel. To enable dynamic streaming channels in your org, from Setup, enter *`User Interface`* in the Quick Find box, then select **User Interface**. Enable **Enable Dynamic Streaming Channel Creation**. You can also enable dynamic channel creation in Metadata API using EventSettings.

SEE ALSO:

Streaming API Developer Guide

Salesforce Surveys Object Model

Learn about how Salesforce Surveys objects relate to one another in Salesforce.



Survey

Represents a survey.

Supported Calls

`describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`

Fields

Field Name	Details
ActiveVersionID	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The ID of the survey version currently activated.
Description	**Type** string **Properties** Nillable **Description** The description of the survey. This field isn't visible in the UI.
DeveloperName	**Type** string **Properties** Filter, Group, Sort **Description** The survey's unique API name.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the current user last viewed a record related to the survey.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed the survey.
LatestVersionId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the most recent version of this survey.
Name	**Type** string **Properties** Filter, Group, Sort

Field Name	Details
	Description The name of the survey that appears in the UI. This field is read-only from API version 50.0.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
`OwnerId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the user who created the survey.
`SurveyType`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Type of the survey.
`TotalVersionsCount`	**Type** int **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The number of versions of the survey.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

SurveyFeed (API version 42.0)
Feed tracking is available for the object.

SurveyOwnerSharingRule
Sharing rules are available for the object.

SurveyShare
Sharing is available for the object.

SurveyEmailBranding

Represents the configuration settings for invitation emails sent to survey participants for a particular survey.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Spring '20 and later, only users with the View Setup and Configuration permission can access this object.

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Create, Update **Description** The body text of the invitation email.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update

Field Name	Details
	Description The unique API name of the email branding configuration.
FooterImageId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the content asset that appears in the footer of the invitation email.
FromEmailAddress	**Type** email **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The email address that appears in the “From” field when the invitation is sent to participants.
HeaderImageId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the content asset that appears in the header of the invitation email.
Language	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the emails. Available languages include: • Chinese (Simplified) • Chinese (Traditional) • Danish • Dutch • English • Finnish • French • German • Italian

Field Name	Details
	• Japanese • Korean • Norwegian • Portuguese (Brazilian) • Russian • Spanish • Spanish (Mexican) • Swedish • Thai
MasterLabel	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The label for these email configuration settings.
Subject	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The subject of the invitation email.

SurveyEngagementContext

Represents the context based on which a survey invitation was sent or a survey response was received. This object is available in API version 49.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
ContextType	**Type** string

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** Context type based on which the survey invitation was sent or the response was received.
ContextValue	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Context based on which the survey invitation was sent or the response was received.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Name of the record.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the record's owner.
SurveyInvitationId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the survey invitation.
SurveyResponseId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the survey response.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

SurveyEngagementContextShare
Sharing is available for the object.

SurveyInvitation

Represents the invitation sent to a participant to complete the survey.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`CommunityId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the Experience Cloud site that you want to send the survey to.
`ContactId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the contact who received the invitation. This field is available in API v49.0 and later.
`EmailBrandingId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the survey email branding object that's associated with this invitation.
`InvitationLink`	**Type** url

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The URL to the survey that is sent to participants. To query on this field, you need access to the associated Survey record.
InviteExpiryDateTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date and time that the survey invitation expires.
IsDefault	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Determines whether this is the default survey invitation to use when the survey is sent to participants.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this survey invitation.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this survey invitation.
LeadId	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description ID of the lead who received the invitation. This field is available in API v49.0 and later.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the survey invitation that appears in the UI.
`OptionsAllowGuestUserResponse`	**Type** boolean **Properties** Create, Filter, Update **Description** Determines whether participants who don't have a Salesforce account can complete the survey.
`OptionsAllowParticipantAccessTheirResponse`	**Type** boolean **Properties** Create, Filter, Update **Description** Determines whether participants can access a copy of their responses after they complete the survey.
`OptionsCollectAnonymousResponse`	**Type** boolean **Properties** Create, Filter, Update **Description** Determines whether participants can complete the survey anonymously.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the user who created the survey invitation.

Field Name	Details
`ParticipantId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the participant if the participant is a Salesforce contact, user, or lead.
`ResponseStatus`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The status of a participant's response to the survey that's associated with the survey invitation. Possible values include: • `NotStarted` —For an invitation with a `ParticipantID`, it means that the recipient hasn't opened the survey. For an invitation without the `ParticipantID`, it means that none of the recipients have opened the survey. • `Started` —For an invitation with a `ParticipantID`, it means that the recipient opened the survey. For an invitation without the `ParticipantID`, it means that the survey has been opened by at least one recipient. • `Paused` —For an invitation with a `ParticipantID`, it means that the recipient has paused the survey. For an invitation without the `ParticipantID`, it means that the survey has been paused by any one of the recipients. Paused isn't available for invitations in which either `OptionsAllowParticipantAccessTheirResponse` or `OptionsCollectAnonymousResponse` is true. • `Completed` —For an invitation with a `ParticipantID`, it means that the recipient has submitted the survey. For an invitation without the `ParticipantID`, it means that the invitation has been submitted by at least one recipient.
`SurveyId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the survey that's sent in the invitation.
`UUID`	**Type** string

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** A unique user ID that's added to a survey invitation generated for a contact, lead,or user.
`UserId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the user who received the invitation. This field is available in API v49.0 and later.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

SurveyInvitationOwnerSharingRule
Sharing rules are available for the object.

SurveyInvitationShare
Sharing is available for the object.

SurveyPage

Represents a page, such as the title page or a question page, in a survey.

Supported Calls

`getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The unique API name of this SurveyPage object.

Field	Details
Name	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The name of the survey page that appears in the UI.
SurveyVersionId	**Type** reference **Properties** Filter, Group, Sort **Description** The version of the survey that the page belongs to.

SurveyQuestion

Represents a question in a survey.

Supported Calls

`describeLayout()describeSObjects()getDeleted(), getUpdated(), query(), retrieve()`

Fields

Field	Details
DeveloperName	**Type** string **Properties** Filter, Group, Sort **Description** The API name of the SurveyQuestion. The API name must be unique within a particular version of the survey.
IsDeprecated	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the question was deleted from the survey.

Field	Details
Name	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** Up to the first 250 characters of the label for the question.
QuestionName	**Type** textarea **Properties** Nillable **Description** The label for the question.
QuestionType	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of question. Possible values include: • `Boolean`—This value is available in API v49.0 and later. • `CSAT` • `Currency` • `Date` • `DateTime` • `Image` • `FreeText` • `MultipleChoice` • `MultiSelectPicklist` • `NPS` • `Number` • `Picklist` • `RadioButton` • `StackRank` • `Rating` • `ShortText`—This value is available in API v49.0 and later. • `Slider` • `Toggle`

Field	Details
SurveyPageId	**Type** reference **Properties** Filter, Group, Sort **Description** Lookup to the SurveyPage that contains the question.
SurveyVersionId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the SurveyVersion that the question belongs to.
ValidationType	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The validations available for the short-text question. Possible values include: • Custom - Cu • Number - Nu

SurveyQuestionChoice

Represents an answer choice that a participant can select for a survey question.

Supported Calls

`describeLayout()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
DeveloperName	**Type** string **Properties** Filter, Group, Sort

Field	Details
	Description The unique API name of the SurveyQuestionChoice object.
`IsDeprecated`	**Type** boolean **Properties** Defaulted on create, Filter , Group, Sort **Description** Indicates whether a question choice was deleted from the survey.
`Name`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** A label for the question choice that appears in the UI.
`QuestionId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the SurveyQuestion object that this choice belongs to.
`SurveyVersionId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The version of the survey that this question choice belongs to.

SurveyQuestionResponse

Represents a participant's answer to a specific question.

Supported Calls

`describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
ChoiceValue	**Type** textarea **Properties** Filter, Nillable, Sort **Description** Response provided by a participant for the following question types: • Multiple choice • Picklist • Radio • Ranking
Datatype	**Type** **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The data type of the question response. Possible values are: • Boolean This value is available in API v49.0 and later. • Date • Double • Int • Number • String
DateTimeValue	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Response provided by a participant for a question of the type date time.
DateValue	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Response provided by a participant for a question of the type date.

Field	Details
`InvitationId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the SurveyInvitation that was sent to the survey participant.
`IsTrueOrFalse`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Response provided by a participant for a question type which has only two possible values: True and False.
`NumberValue`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Response provided by a participant for the following question types: • Net Promoter Score (NPS) • Rating • Score • Slider
`QuestionChoiceId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of SurveyQuestionChoice that a participant chose in response to a question.
`QuestionId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the SurveyQuestion that a participant provided an answer for.

Field	Details
Rank	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Rank provided by a participant for an answer choice for the ranking question type.
ResponseId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the SurveyResponse that is the parent of this SurveyQuestionResponse.
ResponseShortText	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** Up to the first 250 characters of the response provided by a participant for a text type question.
ResponseValue	**Type** textarea **Properties** Nillable **Description** Response provided by a participant for a question.
SurveyVersionId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the SurveyVersion that the response belongs to.

SurveyQuestionScore

Represents the aggregate of responses for the following question types: date, multiple choice, picklist, radio, ranking, rating, scoring, slider, and Net Promoter Score® (NPS®).

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`CumulativeScore`	**Type** double **Properties** Filter, Nillable, Sort **Description** Sum of the responses provided by all the participants for a question of the following types: rating, scoring, and slider. For a question of the type ranking, sum of the weights provided by all the participants for each item. Note: This field is only applicable for the overall score type.
`DateResponse`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** The date selected by one or more participants for a question of the type date. Note: This field is only applicable for the individual score type.
`Name`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** For an overall score type record: • Name of a question. • Name of an item in a question of the type ranking. For an individual score type record: • Name of an item in a question of the type ranking. • Name of a question of the type date. • Response provided by one or more participants for questions of the following types: picklist, multiple choice, rating, ranking, score, slider, NPS.
`QuestionChoiceId`	**Type** reference

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** Unique identifier of the answer choice selected by one or more participants. For an individual score type record, this field is applicable for questions of the following types: picklist, radio, multi choice, ranking and rating. For an overall score type record, this field is applicable for questions of the type ranking.
`QuestionDeveloperName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The API name of the question for which response is recorded. The API name must be unique within a particular version of the survey.
`QuestionId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Unique identifier of the question for which response is recorded.
`QuestionName`	**Type** textarea **Properties** Nillable **Description** Name of the question for which response is recorded.
`QuestionSkippedCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Number of participants who didn't respond to the question. Note: This field is only applicable for the overall score type.
`ResponseCount`	**Type** int

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** For an overall score type record, number of participants who responded to the question. For an individual score type record, number of participants who selected a particular answer choice.
`ResponseValue`	**Type** double **Properties** Filter, Nillable, Sort **Description** Answer choice selected by one or more participants for a question of the following types: rating, slider, score, NPS. Rank provided by the participant for an item in a question of the type ranking. Note: This field is only applicable for the individual score type.
`Score`	**Type** double **Properties** Filter, Nillable, Sort **Description** For an individual score type record, percentage of participants who selected a particular answer choice. Note: For questions of the type ranking, the percentage of participants who have provided the same rank to an item. For overall score type record: • Average score of questions of the following question types: rating, scoring, and slider. • Score of an NPS type question. • Average weight provided by all participants for each item in question of the type ranking. • Number of participants who responded to the question for the following question types: date, radio, multi choice, and picklist.
`ScoreType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Type of the score calculated for a record. Possible values are: • `Individual`

Field	Details
	• `Overall`
`SurveyId`	**Type** reference **Properties** Filter, Group, Sort **Description** Unique identifier of the survey that contains the question for which scores are calculated.
`SurveyInvitationId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Unique identifier of the survey invitation for which scores are calculated.
`SurveyVersionId`	**Type** reference **Properties** Filter, Group, Sort **Description** Unique identifier of the survey version for which scores are calculated.

SurveyResponse

Represents information about a participant's response to a survey, such as the status of the response, the participant's location, and when the survey was completed.

Supported Calls

`describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`

Fields

Field Name	Details
`CompletionDateTime`	**Type** dateTime **Properties** Filter, Nillable, Sort

Field Name	Details
	Description The date and time that the participant completed the survey.
`DataMapperExecutionStatus`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Status of all the survey data maps after a response is received. This field is available in API v49.0 and later where Survey Advanced Features permission is enabled. Possible values are: • `Pending` • `InProgress` • `Success` • `Error`
`InterviewGuid`	**Type** string **Properties** Filter, Group, idLookup, Nillable **Description** An automatically-generated, unique ID for a saved survey response.
`InterviewId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the FlowInterview object that's associated with this response.
`InvitationId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the SurveyInvitation object that's associated with this response.
`IpAddress`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The IP address of the device the participant used to take the survey.
Language	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The language that the participant used to complete the survey. Possible values are: • af—Afrikaans • ar—Arabic • ar_AE—Arabic (United Arab Emirates) • ar_BH—Arabic (Bahrain) • ar_DZ—Arabic (Algeria) • ar_EG—Arabic (Egypt) • ar_IQ—Arabic (Iraq) • ar_JO—Arabic (Jordan) • ar_KW—Arabic (Kuwait) • ar_LB—Arabic (Lebanon) • ar_LY—Arabic (Libya) • ar_MA—Arabic (Morocco) • ar_OM—Arabic (Oman) • ar_QA—Arabic (Qatar) • ar_SA—Arabic (Saudi Arabia) • ar_SD—Arabic (Sudan) • ar_SY—Arabic (Syria) • ar_TN—Arabic (Tunisia) • ar_YE—Arabic (Yemen) • bg—Bulgarian • bn—Bengali • bs—Bosnian • ca—Catalan • cs—Czech • cy—Welsh • da—Danish • de—German • de_AT—German (Austria)

Field Name	Details
	• de_BE—German (Belgium) • de_CH—German (Switzerland) • de_LU—German (Luxembourg) • el—Greek • en_AU—English (Australian) • en_CA—English (Canadian) • en_GB—English (UK) • en_HK—English (Hong Kong) • en_IE—English (Ireland) • en_IN—English (Indian) • en_MY—English (Malaysian) • en_NZ—English (New Zealand) • en_PH—English (Philippines) • en_SG—English (Singapore) • en_US—English • en_ZA—English (South Africa) • es—Spanish • es_AR—Spanish (Argentina) • es_BO—Spanish (Bolivia) • es_CL—Spanish (Chile) • es_CO—Spanish (Colombia) • es_CR—Spanish (Costa Rica) • es_DO—Spanish (Dominican Republic) • es_EC—Spanish (Ecuador) • es_GT—Spanish (Guatemala) • es_HN—Spanish (Honduras) • es_MX—Spanish (Mexico) • es_NI—Spanish (Nicaragua) • es_PA—Spanish (Panama) • es_PE—Spanish (Peru) • es_PR—Spanish (Puerto Rico) • es_PY—Spanish (Paraguay) • es_SV—Spanish (El Salvador) • es_US—Spanish (United States) • es_UY—Spanish (Uruguay) • es_VE—Spanish (Venezuela) • et—Estonian • eu—Basque

Field Name	Details
	• fa—Farsi • fi—Finnish • fr—French • fr_BE—French (Belgium) • fr_CA—French (Canadian) • fr_CH—French (Switzerland) • fr_LU—French (Luxembourg) • ga—Irish • gu—Gujarati • hi—Hindi • hr—Croatian • hu—Hungarian • hy—Armenian • in—Indonesian • is—Icelandic • it—Italian • it_CH—Italian (Switzerland) • iw—Hebrew • ja—Japanese • ka—Georgian • kn—Kannada • ko—Korean • lb—Luxembourgish • lt—Lithuanian • lv—Latvian • mi—Te reo • mk—Macedonian • ml—Malayalam • mr—Marathi • ms—Malay • mt—Maltese • my—Burmese • nl_BE—Dutch (Belgium) • nl_NL—Dutch • no—Norwegian • pl—Polish • pt_BR—Portuguese (Brazil) • pt_PT—Portuguese (European)

Field Name	Details
	• rm—Romansh • ro—Romanian • ro_MD—Romanian (Moldova) • ru—Russian • sh—Serbian (Latin) • sh_ME—Montenegrin • sk—Slovak • sl—Slovene • sq—Albanian • sr—Serbian (Cyrillic) • sv—Swedish • sw—Swahili • ta—Tamil • te—Telugu • th—Thai • tl—Tagalog • tr—Turkish • uk—Ukrainian • ur—Urdu • vi—Vietnamese • xh—Xhosa • zh_CN—Chinese (Simplified) • zh_HK—Chinese (Hong Kong) • zh_SG—Chinese (Singapore) • zh_TW—Chinese (Traditional) • zu—Zulu
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that another Salesforce object last referenced this SurveyResponse object.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort

Field Name	Details
	Description The date and time that someone last viewed this SurveyResponse object.
Latitude	**Type** double **Properties** Filter, Nillable, Sort **Description** The latitude of the participant's location.
Location	**Type** location **Properties** Nillable **Description** The latitude and longitude coordinates of the participant's location.
Longitude	**Type** double **Properties** Filter, Nillable, Sort **Description** The longitude of the participant's location.
Name	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The name of the participant.
Status	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The status of the survey. Possible values include: • NotStarted — The participant hasn't opened the survey. • Started — The participant has opened the survey. • Paused — The participant has paused the survey. Paused isn't available for invitations in which either

Field Name	Details
	`OptionsAllowParticipantAccessTheirResponse` or `OptionsCollectAnonymousResponse` is true. • Completed — The participant has completed the survey.
`SubmitterId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the Salesforce user or contact who completed the survey.
`SurveyId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the survey that the participant completed.
`SurveyVersionId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the version of the survey that the participant completed.

SurveySubject

Represents a relationship between a survey and another object, such as an account or a case.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`LastReferencedDate`	**Type** dateTime

Field Name	Details
	Properties Filter, Nillable, Sort **Description** The timestamp for when the SurveySubject record was last referenced by another object.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed the SurveySubject record.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the SurveySubject record.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Unique identifier of the SurveyInvitation object or SurveyResponse object that is associated with this survey-object relationship.
`SubjectEntityType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Object that the survey is associated with. Possible values include: • *`Account`* • *`Asset`* • *`BusinessMilestone`* • *`Campaign`* • *`CareProgram`* • *`Case`* • *`Claim`*

Field Name	Details
	• *ClaimParticipant* • *Contact* • *Event* • *IndividualApplication* • *InsurancePolicy* • *InsurancePolicyParticipant* • *Lead* • *LiveChatTranscript* • *LoyaltyProgram* • *LoyaltyProgramPartner* • *Opportunity* • *Order* • *PersonalLifeEvent* • *Producer* • *Product2* • *Promotion* • *RebateProgram* • *RetailStore* • *ServiceAppointment* • *ServiceResource* • *Solution* • *Task* • *TransactionJournal* • *User* • *Visit* • *VolunteerProject* • *WorkOrder* • Custom Objects
SubjectId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the object that's associated with the survey.
SurveyId	**Type** reference

Field Name	Details
	Properties Filter, Group, Sort **Description** Unique identifier of the survey that's associated with the record that's represented by `SubjectId`.
`SurveyInvitationId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Unique identifier of the survey invitation that's associated with another object.
`SurveyResponseId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Unique identifier of the survey response that's associated with another object.

SurveyVersion

Represents a version of a survey.

Supported Calls

`describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`

Fields

Field Name	Details
`BrandingSetId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the branding set associated with the survey version.

Field Name	Details
Description	**Type** textarea **Properties** Nillable **Description** The description of this survey version.
IsTemplate	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the survey version is a template. Template surveys are automatically shared with all users in your Salesforce org.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the current user last viewed a record related to the survey version.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed the survey version.
Name	**Type** string **Properties** Filter, Group, Sort Filter, Group, Sort Filter, Group, idLookup, Sort **Description** The name of the survey that appears in the UI.
SurveyId	**Type** reference

Field Name	Details
	Properties Filter, Group, Sort **Description** The ID of the survey associated with the survey version.
`SurveyStatus`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The status of the survey. Possible values include: • `Active` • `Draft` • `Obsolete` • `InvalidDraft`
`SurveyVersion`	**Type** int **Properties** Filter, Group, Sort **Description** The version number of the survey.

SurveyVersionAddlInfo

Represents additional information about a survey version. This information defines the default settings of a survey version. This object is available in API version 49.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`EmailSender`	**Type** textarea **Properties** Filter, Nillable, Sort

Field	Details
	Description The organization-wide email address used to send a survey invitation.
EmailTemplateId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the email template that's used to send an automated survey invitation.
EngagementContextMetadata	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The custom metadata created to get the engagement context from the participants.
InvitationSharingRole	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Indicates the users that share edit access to a survey invitation. Possible values are: • InvitationRecordCreator— Owner of the record that's associated with a survey invitation. • SurveyOwner
Language	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Language used to create the survey. Possible values are: • af—Afrikaans • ar—Arabic • ar_AE—Arabic (United Arab Emirates) • ar_BH—Arabic (Bahrain) • ar_DZ—Arabic (Algeria)

Field	Details
	• ar_EG—Arabic (Egypt) • ar_IQ—Arabic (Iraq) • ar_JO—Arabic (Jordan) • ar_KW—Arabic (Kuwait) • ar_LB—Arabic (Lebanon) • ar_LY—Arabic (Libya) • ar_MA—Arabic (Morocco) • ar_OM—Arabic (Oman) • ar_QA—Arabic (Qatar) • ar_SA—Arabic (Saudi Arabia) • ar_SD—Arabic (Sudan) • ar_SY—Arabic (Syria) • ar_TN—Arabic (Tunisia) • ar_YE—Arabic (Yemen) • bg—Bulgarian • bn—Bengali • bs—Bosnian • ca—Catalan • cs—Czech • cy—Welsh • da—Danish • de—German • de_AT—German (Austria) • de_BE—German (Belgium) • de_CH—German (Switzerland) • de_LU—German (Luxembourg) • el—Greek • en_AU—English (Australian) • en_CA—English (Canadian) • en_GB—English (UK) • en_HK—English (Hong Kong) • en_IE—English (Ireland) • en_IN—English (Indian) • en_MY—English (Malaysian) • en_NZ—English (New Zealand) • en_PH—English (Philippines) • en_SG—English (Singapore) • en_US—English

Field	Details
	- en_ZA—English (South Africa) - es—Spanish - es_AR—Spanish (Argentina) - es_BO—Spanish (Bolivia) - es_CL—Spanish (Chile) - es_CO—Spanish (Colombia) - es_CR—Spanish (Costa Rica) - es_DO—Spanish (Dominican Republic) - es_EC—Spanish (Ecuador) - es_GT—Spanish (Guatemala) - es_HN—Spanish (Honduras) - es_MX—Spanish (Mexico) - es_NI—Spanish (Nicaragua) - es_PA—Spanish (Panama) - es_PE—Spanish (Peru) - es_PR—Spanish (Puerto Rico) - es_PY—Spanish (Paraguay) - es_SV—Spanish (El Salvador) - es_US—Spanish (United States) - es_UY—Spanish (Uruguay) - es_VE—Spanish (Venezuela) - et—Estonian - eu—Basque - fa—Farsi - fi—Finnish - fr—French - fr_BE—French (Belgium) - fr_CA—French (Canadian) - fr_CH—French (Switzerland) - fr_LU—French (Luxembourg) - ga—Irish - gu—Gujarati - hi—Hindi - hr—Croatian - hu—Hungarian - hy—Armenian - in—Indonesian - is—Icelandic

Field	Details
	• it—Italian • it_CH—Italian (Switzerland) • iw—Hebrew • ja—Japanese • ka—Georgian • kn—Kannada • ko—Korean • lb—Luxembourgish • lt—Lithuanian • lv—Latvian • mi—Te reo • mk—Macedonian • ml—Malayalam • mr—Marathi • ms—Malay • mt—Maltese • my—Burmese • nl_BE—Dutch (Belgium) • nl_NL—Dutch • no—Norwegian • pl—Polish • pt_BR—Portuguese (Brazil) • pt_PT—Portuguese (European) • rm—Romansh • ro—Romanian • ro_MD—Romanian (Moldova) • ru—Russian • sh—Serbian (Latin) • sh_ME—Montenegrin • sk—Slovak • sl—Slovene • sq—Albanian • sr—Serbian (Cyrillic) • sv—Swedish • sw—Swahili • ta—Tamil • te—Telugu • th—Thai

Field	Details
	• tl—Tagalog • tr—Turkish • uk—Ukrainian • ur—Urdu • vi—Vietnamese • xh—Xhosa • zh_CN—Chinese (Simplified) • zh_HK—Chinese (Hong Kong) • zh_SG—Chinese (Singapore) • zh_TW—Chinese (Traditional) • zu—Zulu
Name	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** Name of the record.
SurveyQuestionId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the survey question embedded in the email template used to send automated survey invitations.
SurveyVersionId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the survey version. This field is unique within your organization

TabDefinition

Represents a custom tab. Returns only the tabs that the current user has access to. This object is available in API version 43.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `search()`

Fields

Field Name	Details
DurableId	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Unique identifier for the tab. Always retrieve this value before using it, because the value isn’t guaranteed to stay the same from one release to the next. Simplify queries by using this field instead of making multiple queries.
IsAvailableInAloha	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the tab is available in Salesforce Classic.
IsAvailableInDesktop	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the tab is available on desktop.
IsAvailableInLightning	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the tab is available in Lightning Experience.
IsAvailableInMobile	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field Name	Details
	Description Indicates whether the tab is available in the Salesforce mobile app.
IsCustom	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the tab is a custom tab created by admins in the org.
Label	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The localized label corresponding to the `MasterLabel` field in the Tooling API object.
MobileUrl	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The URL that can be used to launch this tab in the Salesforce mobile app.
Name	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The developer name of the tab.
SobjectName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the sObject corresponding to the tab.

Field Name	Details
Url	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The URL that can be used to launch this tab on desktop.

TagDefinition

Defines the attributes of child Tag objects.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`

Special Access Rules

As of Summer '20 and later, only authenticated internal and external users can access this object.

Fields

Field	Detail
Name	**Type** string **Properties** Filter, Nillable, Update **Description** Identifies the tag word or phrase.
Type	**Type** picklist **Properties** Filter, Nillable, Restricted picklist **Description** Defines the visibility of a tag. Possible value are: • **Public**: The tag can be viewed and manipulated between all users in an organization. • **Personal**: The tag can be viewed or manipulated only by a user with a matching `OwnerId`.

Usage

When you create a tag for a record, an association is created with to a corresponding TagDefinition:

- If the value in the tag's `Name` field is new, a new TagDefinition record is automatically created and becomes the parent of the tag.
- If the value in the tag's `Name` field already exists in a TagDefinition, that TagDefinition automatically becomes the parent of the tag.

Each TagDefinition record has a one-to-many relationship with its child tag records.

The following standard objects represent tags for records:

- AccountTag
- AssetTag
- CampaignTag
- CaseTag
- ContactTag
- ContractTag
- DocumentTag
- EventTag
- LeadTag
- NoteTag
- OpportunityTag
- SolutionTag
- TaskTag

Custom objects may also be tagged. Tags for custom objects are identified by a suffix of two underscores immediately followed by the word `tag`. For example, a custom object named `Meeting` has a corresponding tag named Meeting__tag in that organization's WSDL. Meeting__tag is only valid for `Meeting` objects.

TagDefinition is useful for mass operations on any tag record. For instance, if you want to rename existing tags, you can search for the appropriate TagDefinition object, update it, and the child tag's `Name` values are also changed. The following Java example replaces all `WC` tags with the phrase `West Coast`:

```
public void tagDefinitionSample() {
  String soqlQuery = "SELECT Id, Name FROM TagDefinition " +
      "WHERE Name = 'WC'";
  QueryResult qResult = null;
  try {
      qResult = connection.query(soqlQuery);
    TagDefinition tagDef = (TagDefinition) qResult.getRecords()[0];
    tagDef.setName("West Coast");
    connection.update(new SObject[]{tagDef});
  } catch (ConnectionException ce) {
    ce.printStackTrace();
  }
}
```

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

Task

Represents a business activity such as making a phone call or other to-do items. In the user interface, Task and Event records are collectively referred to as activities.

Note: Task fields related to calls are exclusive to Salesforce CRM Call Center. Also, `query()`, `delete()`, and `update()` aren't allowed with tasks related to more than one contact in API versions 23.0 and earlier.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Field Type
`AccountId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Represents the ID of the related Account. The `AccountId` is determined as follows. If the value of `WhatId` is any of the following objects, then Salesforce uses that object's `AccountId`. • Account • Opportunity • Contract • Custom object that is a child of Account If the value of the `WhatId`field is any other object, and the value of the `WhoId` field is a Contact object, then Salesforce uses that contact's `AccountId`. (If your organization uses Shared Activities, then Salesforce uses the `AccountId` of the primary contact.) Otherwise, Salesforce sets the value of the `AccountId` field to `null`. For information on IDs, see ID Field Type.
`ActivityDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Represents the due date of the task. This field has a timestamp that is always set to midnight in the Coordinated Universal Time (UTC) time zone. The timestamp is not relevant; do not attempt to alter it to accommodate time zone differences. Label is **Due Date**.

Field	Field Type
	Note: This field can't be set or updated for a recurring task (`IsRecurrence` is `true`).
`CallDisposition`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Represents the result of a given call, for example, "we'll call back," or "call unsuccessful." Limit is 255 characters. Not subject to field-level security, available for any user in an organization with Salesforce CRM Call Center.
`CallDurationInSeconds`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Duration of the call in seconds. Not subject to field-level security, available for any user in an organization with Salesforce CRM Call Center.
`CallObject`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Name of a call center. Limit is 255 characters. Not subject to field-level security, available for any user in an organization with Salesforce CRM Call Center.
`CallType`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The type of call being answered: Inbound, Internal, or Outbound.
`CompletedDateTime`	**Type** dateTime

Field	Field Type
	Properties Filter, Nillable, Sort **Description** The date and time the task was saved with a Closed status. • For insert, if the task is saved with a Closed status the field is set. If the task is saved with an Open status the field is set to NULL. • For update, if the task is saved with a new Closed status, the field is reset. If the task is saved with a new non-closed status, the field is reset to NULL. If the task is saved with the same closed status (that is, unchanged) there is no change to the field. Note: The status is a dynamic enum. If the Closed mapping is changed it won't cause an update of existing tasks. Only new insert/update operations are affected.
ConnectionReceivedId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the PartnerNetworkConnection that shared this record with your organization. This field is available if you enabled Salesforce to Salesforce.
ConnectionSentId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the PartnerNetworkConnection that you shared this record with. This field is available if you enabled Salesforce to Salesforce. This field is supported using API versions earlier than 15.0. In all other API versions, this field's value is null. You can use the new PartnerNetworkRecordConnection object to forward records to connections.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** Contains a text description of the task.
IsArchived	**Type** boolean

Field	Field Type
	Properties Defaulted on create, Filter, Group, Sort **Description** Indicates whether the event has been archived.
IsClosed	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the task has been completed (true) or not (false). Is only set indirectly via the Status picklist. Label is **Closed**.
IsHighPriority	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates a high-priority task. This field is derived from the Priority field.
IsRecurrence	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Indicates whether the task is scheduled to repeat itself (true) or only occurs once (false). This field is read-only on update, but not on create. If this field value is true, then RecurrenceStartDateOnly, RecurrenceEndDateOnly, RecurrenceType, and any recurrence fields associated with the given recurrence type must be populated. See Recurring Tasks.
IsReminderSet	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether a popup reminder has been set for the task (true) or not (false).
IsVisibleInSelfService	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Field Type
	Description Indicates whether a task associated with an object can be viewed in the Customer Portal (`true`) or not (`false`). If your organization has digital experiences enabled, tasks marked `IsVisibleInSelfService` are visible to any external user in the Experience Cloud site, as long as the user has access to the record the task was created on.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the User or Group who owns the record. Label is **Assigned To ID**. This field accepts Groups of type Queue only. In the user interface, Group IDs correspond with the queue's list view names. To create or update tasks assigned to Group, use v48.0 or later.
`Priority`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Required. Indicates the importance or urgency of a task, such as high or low.
`RecurrenceActivityId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Read-only. Not required on create. ID of the main record of the recurring task. Subsequent occurrences have the same value in this field.
`RecurrenceDayOfMonth`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The day of the month in which the task repeats.
`RecurrenceDayOfWeekMask`	**Type** int

Field	Field Type
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The day or days of the week on which the task repeats. This field contains a bitmask. The values are as follows: • Sunday = 1 • Monday = 2 • Tuesday = 4 • Wednesday = 8 • Thursday = 16 • Friday = 32 • Saturday = 64 Multiple days are represented as the sum of their numerical values. For example, Tuesday and Thursday = 4 + 16 = 20.
`RecurrenceEndDateOnly`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The last date on which the task repeats. This field has a timestamp that is always set to midnight in the Coordinated Universal Time (UTC) time zone. The timestamp is not relevant; do not attempt to alter it to accommodate time zone differences.
`RecurrenceInstance`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The frequency of the recurring task. Possible values are: • `First`—1st • `Fourth`—4th • `Last`—last • `Second`—2nd • `Third`—3rd
`RecurrenceInterval`	**Type** int

Field	Field Type
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The interval between recurring tasks.
`RecurrenceMonthOfYear`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The month of the year in which the task repeats.
`RecurrenceRegeneratedType`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Represents what triggers a repeating task to repeat. Add this field to a page layout together with the `RecurrenceInterval` field, which determines the number of days between the triggering date (due date or close date) and the due date of the next repeating task in the series. Label is **Repeat This Task**. This field has the following picklist values: • **None**: The task doesn't repeat. • **After due date**: The next repeating task will be due the specified number of days after the current task's due date. • **After the task is closed**: The next repeating task will be due the specified number of days after the current task is closed. • **(Task closed)**: This task, now closed, was opened as part of a repeating series. Note: When tasks in a series are set to repeat after their due date, Salesforce doesn't create recurrences that would have been due in the past. Instead, Salesforce keeps adding the interval until a repeated task has a due date in the future. For example, suppose that someone sets a task to repeat three days after it's due. But, that person doesn't complete the task (mark it Closed) until five days after it's due. Instead of creating a task that's already overdue, Salesforce gives the new task a due date of tomorrow. This due date is equivalent to 6 days after the due date; two intervals of three days each. If that person completes the repeating task (marks it Closed) before the due date, the next task is still due three days after the due date.
`RecurrenceStartDateOnly`	**Type** date

Field	Field Type
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The date when the recurring task begins. Must be a date and time before `RecurrenceEndDateOnly`.
`RecurrenceTimeZoneSidKey`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The time zone associated with the recurring task. For example, “UTC-8:00” for Pacific Standard Time.
`RecurrenceType`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates how often the task repeats. For example, daily, weekly, or every nth month (where “nth” is defined in `RecurrenceInstance`).
`ReminderDateTime`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Represents the time when the reminder is scheduled to fire, if `IsReminderSet` is set to `true`. If `IsReminderSet` is set to `false`, then the user may have deselected the reminder checkbox in the Salesforce user interface, or the reminder has already fired at the time indicated by the value.
`Status`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Required. The status of the task, such as In Progress or Completed. Each predefined `Status` field implies a value for the `IsClosed` flag. To obtain picklist values, query the TaskStatus object. Note: This field can’t be updated for recurring tasks (`IsRecurrence` is `true`).

Field	Field Type
`Subject`	**Type** combobox **Properties** Create, Filter, Nillable, Sort, Update **Description** The subject line of the task, such as “Call” or “Send Quote.” Limit: 255 characters.
`TaskSubtype`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Provides standard subtypes to facilitate creating and searching for specific task subtypes. This field isn’t updateable. `TaskSubtype` values: • `Task` • `Email` • `List Email` • `Cadence` • `Call` Note: The `Cadence` subtype is an internal value used by High Velocity Sales, and can’t be set manually.
`TaskWhoIds`	**Type** JunctionIdList **Properties** Create, Update **Description** A string array of contact or lead IDs related to this task. This `JunctionIdList` field is linked to the `TaskWhoRelations` child relationship. `TaskWhoIds` is only available when the shared activities setting is enabled. The first contact or lead ID in the list becomes the primary `WhoId` if you don’t specify a primary `WhoId`. If you set the `EventWhoIds` field to null, all entries in the list are deleted and the value of `WhoId` is added as the first entry. Warning: Adding a `JunctionIdList` field name to the `fieldsToNull` property deletes all related junction records. This action can’t be undone.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Field Type
	Description The type of task, such as Call or Meeting.
WhatCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Available to organizations that have Shared Activities enabled. Count of related TaskRelations pertaining to `WhatId`. Count of the `WhatId` must be *1* or less.
WhatId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The `WhatId` represents nonhuman objects such as accounts, opportunities, campaigns, cases, or custom objects. `WhatIds` are polymorphic. Polymorphic means a `WhatId` is equivalent to the ID of a related object. The label is `Related To ID`.
WhoCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Available to organizations that have Shared Activities enabled. Count of related TaskRelations pertaining to `WhoId`.
WhoId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The WhoId represents a human such as a lead or a contact. WhoIds are polymorphic. Polymorphic means a WhoId is equivalent to a contact's ID or a lead's ID. The label is `Name ID`. If Shared Activities is enabled, the value of this field is the ID of the related lead or primary contact. If you add, update, or remove the WhoId field, you might encounter problems with triggers, workflows, and data validation rules that are associated with the record. The label is `Name ID`. Beginning in API version 37.0, if the contact or lead ID in the `WhoId` field is not in the `TaskWhoIds` list, no error occurs and the ID is added to the `TaskWhoIds` as the primary

Field	Field Type
	`WhoId`. If `WhoId` is set to null, an arbitrary ID from the existing `TaskWhoIds` list is promoted to the primary position.

Usage

Recurring Tasks

- Recurring tasks are available in API version 16.0 and later.
- After a task is created, it can't be changed from recurring to nonrecurring or vice versa.
- When a user creates a series of recurring tasks, Salesforce creates a main record and subsequent occurrences. For the main record, `IsRecurrence` is set to `true` and other fields that define the recurrence pattern are populated. The ID of the main record of the recurring task is saved in the subsequent occurrences, in the `RecurrenceActivityId` field.
- When you delete a recurring task series through the API, all open and closed task occurrences in the series are removed. However, when you delete a recurring task series through the user interface, only open tasks occurrences (`IsClosed` is `false`) in the series are removed.
- If `IsRecurrence` is `true`, then `RecurrenceStartDateOnly`, `RecurrenceEndDateOnly`, `RecurrenceType`, and any properties associated with the given recurrence type (see the following table) must be populated.
- When you change the `RecurrenceStartDateOnly` field or the recurrence pattern, all open tasks occurrences in the series are deleted and new open task occurrences are created based on the new recurrence pattern. The following fields determine the recurrence pattern: `RecurrenceType`, `RecurrenceTimeZoneSidKey`, `RecurrenceInterval`, `RecurrenceDayOfWeekMask`, `RecurrenceDayOfMonth`, `RecurrenceInstance`, and `RecurrenceMonthOfYear`.
- When you change the value of `RecurrenceEndDateOnly` to an earlier date (for example, from January 20th to January 10th), all open task occurrences in the series with the `ActivityDate` value greater than the new end date value are deleted. Other open and closed task occurrences in the series are not affected.
- When you change the value of `RecurrenceEndDateOnly` to a later date (for example, from January 10th to January 20th), new task occurrences are created up to the new end date. Existing open and closed tasks in the series are not affected.

This table describes the usage of recurrence fields for Salesforce Classic recurring events. Each recurrence type must have all of its properties set. All unused properties must be set to null.

RecurrenceType Value	Properties	Example Pattern
RecursDaily	RecurrenceInterval	Every second day
RecursEveryWeekday	RecurrenceDayOfWeekMask	Every weekday - can't be Saturday or Sunday
RecursMonthly	RecurrenceDayOfMonth RecurrenceInterval	Every second month, on the third day of the month
RecursMonthlyNth	RecurrenceInterval RecurrenceInstance RecurrenceDayOfWeekMask	Every second month, on the last Friday of the month
RecursWeekly	RecurrenceInterval RecurrenceDayOfWeekMask	Every three weeks on Wednesday and Friday
RecursYearly	RecurrenceDayOfMonth RecurrenceMonthOfYear	Every March on the twenty-sixth day of the month

RecurrenceType Value	Properties	Example Pattern
RecursYearlyNth	RecurrenceDayOfWeekMask RecurrenceInstanceRecurrenceMonthOfYear	The first Saturday in every October

JunctionIdList

The `JunctionIdList` field is now implemented in the Event and Task objects. With a single API call, it's easy to create many-to-many relationships between the Event or Task object with contacts, leads, or users.

To create a Task with related Contacts without `JunctionIdList`, you first have to create the task, then use the returned task ID to create the `TaskRelation` records. If the `TaskRelation` save call fails, error handling is your responsibility because the task has already been committed to the database.

```
public void createTasksOld(Contact[] contacts) {
 Task task = new Task();
 task.setSubject("New Task");
 SaveResult[] results = null;
 try {
  results = connection.create(new Task[] {
   task
  });
  if (results[0].isSuccess()) {
   TaskRelation[] relations = new TaskRelation[contacts.size()];
   for (int i = 0; i < contacts.length; i++) {
    relations[i] = new TaskRelation();
    relations[i].setTaskId(results[0].getID());
    relations[i].setRelationId(contacts[i].getID());
   }
   results = connection.create(relations);
  }
 } catch (ConnectionException ce) {
  ce.printStackTrace();
 }
}
```

To create a task using `JuncionIdList`, IDs are pulled from the related contacts and both the task and the `TaskRelation` records are created in one API call. If the `TaskRelation` fails, the task is rolled back because it's all done in a single API call.

```
public void createTaskNew(Contact[] contacts) {
 String[] contactIds = new String[contacts.size()];
 for (int i = 0; i < contacts.size(); i++) {
  contactIds[i] = contacts[i].getID();
 }
 Task task = new Task();
 task.setSubject("New Task");
 task.setTaskWhoIds(contactIds);
 SaveResult[] results = null;
 try {
  results = connection.create(new Task[] {
   task
  });
 } catch (ConnectionException ce) {
  ce.printStackTrace();
```

```
  }
}
```

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

TaskFeed (API version 20.0)
Feed tracking is available for the object.

SEE ALSO:

Object Basics

TaskPriority

Represents the importance or urgency of a Task, such as High, Normal, or Low.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Customer and Partner Portal users can’t access this object.

Fields

Field	Details
`ApiName`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** Uniquely identifies a picklist value so it can be retrieved without using an id or master label.
`IsDefault`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this is the default task priority value (`true`) or not (`false`) in the picklist. Only one value in the picklist can be the default value.

Field	Details
`IsHighPriority`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this task priority value represents a high priority Task (`true`) or not (`false`). Multiple task priority values can represent a high-priority Task.
`MasterLabel`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Master label for this task priority value. This display value is the internal label that does not get translated. Limit: 255 characters.
`SortOrder`	**Type** int **Properties** Filter, Nillable, Group, Sort **Description** Number used to sort this value in the task priority picklist. These numbers are not guaranteed to be sequential, as some previous task priority values might have been deleted.

Usage

This object represents a value in the task priority picklist. The task priority picklist provides additional information about the importance of a Task, such as whether a given priority value represents a high priority. Your client application can query on this object to retrieve the set of values in the task priority picklist, and then use that information while processing Task objects to determine more information about a given task. For example, the application could test whether a given Task is high priority based on its `Priority` value and the value of the `IsHighPriority` in the associated TaskPriority object.

SEE ALSO:

Object Basics

TaskRelation

Represents the relationship between a task and a lead, contacts, and other objects related to the task. If Shared Activities is enabled, this object doesn't support triggers, workflow, or data validation rules. This object is available in API version 24.0 and later.

TaskRelation is only available if you've enabled Shared Activities in your organization.

TaskRelation allows the following relationships:

- A task can be related to one lead or up to 50 contacts.
- A task can also be related to one account, asset, campaign, case, contract, opportunity, product, solution, or custom object.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `queryAll()`, `retrieve()`

Fields

Field Name	Details
`AccountId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the Account ID of the relation. For information on IDs, see ID Field Type.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a task has been deleted; label is **Deleted**. When a TaskRelation record is deleted, it isn't moved to the Recycle Bin and can't be undeleted, unless the record was cascade-deleted when the parent object was deleted. Don't use the `IsDeleted` field to detect deleted records in SOQL queries or `queryAll()` calls on directly deleted relation records. Instead, use the call `getDeleted()`.
`IsWhat`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Indicates whether the relation is an Account, Opportunity, Campaign, Case, other standard object, or a custom object. Value is `false` if `RelationId` is a contact or lead and `true` otherwise.
`RelationId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** Indicates the `WhatId` or `WhoId` in the relationship. For more information, see `Task`. For information on IDs, see ID Field Type.
`TaskId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Represents the ID of the associated Task. For information on IDs, see ID Field Type.

Usage

See contacts associated with a task

```
public void queryWhosOfTaskSample() {
     String soqlQuery = "SELECT Id, Subject, (SELECT RelationId, Relation.Name, IsWhat
 from TaskRelations WHERE isWhat = false) FROM Task WHERE Id = '00T x00000050KEN'";
    QueryResult qResult = null;
    try {
        qResult = connection.query(soqlQuery);
        TaskRelation relation1 =
(TaskRelation)qResult.getRecords()[0].getTaskRelations().getRecords()[0];
    }catch (ConnectionException ce) {
        ce.printStackTrace();
     }
 }
```

SEE ALSO:

Task

TaskWhoRelation

TaskStatus

Represents the status of a Task, such as Not Started, Completed, or Closed.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`ApiName`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** Uniquely identifies a picklist value so it can be retrieved without using an id or master label.
`IsClosed`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this task status value represents a closed Task (`true`) or not (`false`). Multiple task status values can represent a closed Task.
`IsDefault`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this is the default task status value (`true`) or not (`false`) in the picklist.
`MasterLabel`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Master label for this task status value. This display value is the internal label that does not get translated. Limit: 255 characters.
`SortOrder`	**Type** int **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description Number used to sort this value in the task status picklist. These numbers are not guaranteed to be sequential, as some previous task status values might have been deleted.

Usage

This object represents a value in the task status picklist. The task status picklist provides additional information about the status of a Task, such as whether a given status value represents an open or closed task. Your client application can query this object to retrieve the set of values in the task status picklist, and then use that information while processing Task records to determine more information about a given task. For example, the application could test whether a given task is open or closed based on the Task `Status` value and the value of the `IsClosed` property in the associated TaskStatus record.

SEE ALSO:

Object Basics

TaskTag

Associates a word or short phrase with a Task.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ItemId`	**Type** reference **Properties** Create, Filter **Description** ID of the tagged item.
`Name`	**Type** string **Properties** Create, Filter

Field Name	Details
	Description Name of the tag. If this value does not already exist, a new TagDefinition is created and becomes the parent of this Tag object. Otherwise, a TagDefinition with the same name becomes the parent of this Tag object. Parent relationships are created automatically.
`TagDefinitionId`	**Type** reference **Properties** Filter **Description** ID of the parent TagDefinition object that owns the tag.
`Type`	**Type** picklist **Properties** Create, Filter, Restricted picklist **Description** Defines the visibility of a tag. Valid values: • `Public`—The tag can be viewed and manipulated by all users in an organization. • `Personal`—The tag can be viewed or manipulated only by a user with a matching `OwnerId`.

Usage

TaskTag stores the relationship between its parent TagDefinition and the Task being tagged. Tag objects act as metadata, allowing users to describe and organize their data.

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

TaskWhoRelation

Represents the relationship between a task and a lead or contacts. This object is available in API version 29.0 and later.

This derived object is a filtered version of the TaskRelation on page 2827 object; that is, IsParent is *`true`* and IsWhat is *`false`*. It doesn't represent relationships to accounts, opportunities, or other objects.

TaskWhoRelation allows a variable number of relationships: one lead or up to 50 contacts. Available only if you've enabled Shared Activities for your organization.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
RelationId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the contacts or lead related to the task.
TaskId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the task.
Type	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Indicates whether the person related to the task is a lead or contact.

Usage

Apex example that queries contacts associated with a task

```
public void queryWhosOfTaskSample() {
    String soqlQuery = "SELECT Id, Subject, (SELECT RelationId, Relation.Name, IsWhat
from TaskWhoRelations) FROM Task WHERE Id = '00Tx0000005OKEN'";
    QueryResult qResult = null;
    try {
        qResult = connection.query(soqlQuery);
        TaskWhoRelation relation1 =
(TaskWhoRelation)qResult.getRecords()[0].getTaskWhoRelations().getRecords()[0];
    } catch (ConnectionException ce) {
        ce.printStackTrace();
    }
}
```

SEE ALSO:

Task

TaskRelation

TenantSecret

This object stores an encrypted organization-specific key fragment that is used with the master secret to produce organization-specific data encryption keys. This object is available in API version 34.0 and later.

You can rotate tenant secrets of the `Data` type once every four hours in a sandbox org or every 24 hours in production orgs. You can rotate tenant secrets of the `SearchIndex` type once every seven days.

Note: This information is about Shield Platform Encryption and not Classic Encryption.

Supported Calls

`create()`, `query()`, `retrieve()`, `update()`

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** The description of the tenant secret.
`KeyDerivationMode`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The key derivation mode applied to customer-supplied key material. Modes are: **PBKDF2** The customer-supplied key material is used by the Shield KMS to create a derived data encryption key. **NONE** The customer-supplied key material is used by the Shield KMS as the final data encryption key to directly encrypt and decrypt data. Available in API version 43.0 and later.
`RemoteKeyCertificate`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description The name of the certificate whose public key is used to encrypt the `SecretValue` during a remote key callout. Available in API version 45.0 and later.
`RemoteKeyIdentifier`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** A unique key identifier for key material fetched from a remote key service. Available in API version 45.0 and later.
`RemoteKeyServiceID`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The named credential used to fetch remote key material from a remote key service. Available in API version 45.0 and later.
`SecretValue`	**Type** base64 **Properties** Create, Nillable, Update **Description** The encrypted 256-bit secret value encoded in base64.
`SecretValueCertificate`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The certificate needed to upload a customer-supplied tenant secret. Each certificate has a unique name.
`SecretValueHash`	**Type** base64 **Properties** Create

Field Name	Details
	Description The matching tenant secret hash for an uploaded customer-supplied tenant secret.
`Source`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The source of the encryption key material. Values are: **HSM** A Salesforce-generated tenant secret. **Uploaded** A customer-supplied tenant secret or data encryption key. **Remote** A tenant secret or data encryption key fetched from a key service outside of Salesforce. Available in API version 44.0 and later. Note: Tenant secrets with a `Source` value of Remote are listed as Fetched on the Key Management page in Setup. Available in API version 43.0 and later.
`Status`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The status of the tenant secret. Values are: **Active** Can be used to encrypt and decrypt new or existing data. **Archived** Can't encrypt new data. Can be used to decrypt data previously encrypted with this key when it was active. **Destroyed** Can't encrypt or decrypt data. Data encrypted with this key when it was active can no longer be decrypted. Files and attachments encrypted with this key can no longer be downloaded. You can update the `Status` field through the API in versions 44.0 or later.
`Type`	**Type** picklist

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The type of tenant secret. The `Type` field is available in API version 39.0 and later. The following values appear in the `Type` picklist: • `Data`—data stored in the Salesforce database. Includes data in encrypted fields, files, and attachments but not search index files. Tenant secrets created in API version 34.0 and later default to the `Data` type. • `SearchIndex`—search index files (available in API version 39.0 and later). • `Analytics`—Einstein Analytics data (available in API version 39.0 and later). • `DeterministicData`—data stored in the Salesforce database. Includes data in encrypted fields, files, and attachments, but not search index files (available in API version 39.0 and later). • `EventBus`—Change Data Capture event data (available in API version 43.0 and later). Change Data Capture is part of a pilot.
`Version`	**Type** int **Properties** Filter, Group, idLookup, Sort **Description** The version number of this secret. The version number is unique within your org.

Usage

Use this object to create or update an org-specific tenant secret or customer-supplied key material.

Example 1: Build an automated tenant secret creation and activation solution similar to the following.

1. Start by creating an Apex class to create the tenant secret. Specify the value of the tenant secret to encrypt data of a particular type.

```
global class CreateNewSecret implements Schedulable {
   global void execute(SchedulableContext SC) {
      TenantSecret secret = new TenantSecret ();
      secret.description = 'Created new secret from scheduled job';
      secret.type= 'SearchIndex';
      insert secret;
   }
}
```

Note: `Type` is available in API version 39.0 and later. `Type` is optional; all tenant secrets default to the `Data` type.

2. Schedule the Apex class to run at the specified interval.

This Apex code only needs to be run a single time to schedule the job. This code runs the job every 90 days.

```
CreateNewSecret secret = new CreateNewSecret();
String schedule = '0 0 0 1 JAN,APR,JUL,OCT ?';
String jobID = system.schedule('Automated secret creation and activation', schedule,
secret);
```

3. Validate that the job is scheduled.
4. Validate that tenant secrets are created after the job is run.

Example 2: Upload a customer-supplied tenant secret or customer-supplied data encryption key.

1. Create a certificate that's compatible with customer-supplied key material. See Generate a BYOK-Compatible Certificate in Salesforce Help.
2. Then upload your matching key material and key material hash. Include the unique name of the compatible certificate. The key material is uploaded in encrypted form.

```
      TenantSecret secret = new TenantSecret ();
      secret.description = 'New uploaded secret';
      secret.type= 'Data';
      secret.SecretValue = ...
      EncodingUtil.base64Decode('...');;
      secret.SecretValueCertificate = ...;
      secret.SecretValueHash = ...
      EncodingUtil.base64Decode('...');
      insert secret;
```

You can use this script to generate a customer-supplied tenant secret and tenant secret hash.

3. Validate that the key material is uploaded.

Example 3: Opt out of key derivation on a key-by-key basis when you upload key material. When you upload your key material, specify `'Source':Uploaded` and `'KeyDerivationMode':'NONE'`, and set non-null values for the SecretValueCertificate, SecretValue, and SecretValueHash.

Example 4: Import a tenant secret of the `Data` type.

```
TenantSecret secret = [SELECT Id FROM TenantSecret WHERE Type = 'Data' AND Version = 2];
secret.SecretValue = "<previously_exported_secret_as_a_String>";
update secret;
```

Example 5: Export a tenant secret by writing the `secret.SecretValue` to a file. Here's an example that uses a tenant secret of the `SearchIndex` type.

```
TenantSecret secret = [SELECT SecretValue FROM TenantSecret WHERE Type = 'TenantSecret'
AND Version = 2];
secret.SecretValue =...;
update secret;
```

Example 6: Destroy a tenant secret of the `Data` type.

Warning: Your tenant secret is unique to your organization and to the specific data to which it applies. Once you destroy a tenant secret, related data is not accessible unless you previously exported the key and then import the key back into Salesforce.

```
TenantSecret secret = [SELECT Id FROM TenantSecret WHERE Type = 'Data' AND Version = 2];
secret.SecretValue = NULL;
```

```
secret.Status = Destroyed;
update secret;
```

Example 7: Change the `Status` of a tenant secret from Archived to Destroyed. Include the SecretValue and new tenant secret Status.

```
TenantSecret secret = [SELECT Id FROM TenantSecret WHERE Type = 'Data' AND Version = 2];
secret.Status = Destroyed;
update secret;
```

Cache-Only Key Service customers can change the Status of cache-only key tenant secrets. For example, reactivate a cache-only key by changing its Status from Destroyed to Active.

Example 8: Create a callout connection that fetches a cache-only key tenant secret from a key service outside of Salesforce.

1. Make sure that your org has at least one active Data in Salesforce key, either Salesforce-generated or customer-supplied. Then turn on Allow Cache-Only Keys with BYOK from the Advanced Settings page in Setup.
2. Create a certificate that's compatible with customer-supplied key material. See Generate a BYOK-Compatible Certificate in Salesforce Help.
3. Create and assemble your key material.
4. Create a named credential to serve as your authenticated callout mechanism. You can define your named credential through Setup or directly with Apex. Specify a BYOK-compatible certificate and an HTTPS endpoint.
5. Configure the connection to your remote key service. This connection uses named credential and its associated certificate to fetch a specified cache-only key tenant secret.

```
remote_params = { 'Source': 'Remote',
'RemoteKeyIdentifier': ...,
'RemoteKeyServiceId: ...,
'RemoteKeyCertificate': ...}

sf.TenantSecret.create(remote_params)
```

Territory

Represents a flexible collection of accounts and users where the users have at least read access to the accounts, regardless of who owns the accounts. Only available if territory management has been enabled for your organization.

Note: The original territory management feature is scheduled for retirement for all customers as of Summer '21. After the feature is retired, users can't access the original territory management feature and its underlying data. We encourage you to migrate to Enterprise Territory Management. We also strongly recommend that you keep a comprehensive backup of your territory data while you're still using the original territory management feature. For more information, see The Original Territory Management Module Will Be Retired in the Summer '21 Release. The information in this topic applies to the original territory management feature only, and not to Enterprise Territory Management.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Spring '20 and later, only standard and partner users can access this object, and only users with the Manage Territories permission can edit this object.

Fields

Field	Details
`AccountAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Sort, Update **Description** Account access level granted to users assigned to this territory.
`CaseAccessLevel`	**Type** picklist **Properties** Create, Filter, Nillable, Group, Sort, Update **Description** Case access level granted to users assigned to this territory.
`ContactAccessLevel`	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** A value that represents the type of access granted to the target Group, UserRole, or User for any associated contacts. The possible values are: • `None` • `Read` • `Edit` Note: When `DefaultContactAccess` is set to "Controlled by Parent," you can't create or update this field.
`Description`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the territory that is 1,000 characters or less.

Field	Details
DeveloperName	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Territory Name** in the user interface. This field is available in API version 24.0 and later. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
ForecastUserId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the Forecast Manager, who is the user to whom forecasts from this territory's child territories roll up.
MayForecastManagerShare	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the forecast manager can manually share their own forecast.
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** A name for the territory. Limit is 80 characters. Corresponds to **Label** on the user interface.
OpportunityAccessLevel	**Type** picklist

Field	Details
	Properties Create, Filter, Group, Sort, Update **Description** Opportunity access level granted to users assigned to this territory.
`ParentTerritoryID`	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** Territory immediately above this territory in the territory hierarchy. Label is **Parent Territory ID**.
`RestrictOppTransfer`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Update **Description** Indicates whether the opportunities associated with this territory are kept within the bounds of this territory and this territory's children when account assignment rules are run (`true`), or if opportunities associated with this territory can be assigned to other nodes of the territory hierarchy when account assignment rules are run (`false`). Label is **Confine Opportunity Assignment**.

Usage

Use the Territory object to query your organization's territory hierarchy. Use it to obtain valid territory IDs when querying or modifying records associated with territories.

SEE ALSO:

AccountTerritoryAssignmentRule

AccountTerritoryAssignmentRuleItem

UserTerritory

Territory2

Represents a sales territory. Available only if Enterprise Territory Management has been enabled for your organization.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Summer '20 and later, only standard and partner users can access this object. If a territory model is in `Active` state, any standard or partner user can view that model, including its territories and assignment rules. For territories in an active model, any standard or partner user can view assigned records and assigned users subject to your org's sharing settings. Users cannot view territory models in other states (such as `Planning` or `Archived`).

Fields

Field Name	Details
`AccountAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Represents the default account record access levels for users that are assigned to the territory. Values are: • `Read Only` • `Read/Write` • `Owner`
`CaseAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Represents the default case record access levels for users that are assigned to the territory. Values are: • `Private` • `Read Only` • `Read/Write`
`ContactAccessLevel`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Represents the default contact record access levels for users that are assigned to the territory. Values are: • `Private` • `Read Only` • `Read/Write`

Field Name	Details
`Description`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** The description of the territory. The field label in the user interface is `Territory Description`.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. The unique name of the object in the API. This name can contain only underscores and alphanumeric characters and must be unique in your organization. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. The field label in the user interface is `Territory Name`. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`ForecastUserId`	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** Unique identifier of a territory's forecast manager. To select a `ForecastUserId`, select someone in the list of users assigned to the territory.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the territory. The field label in the user interface is `Territory Label`.
`OpportunityAccessLevel`	**Type** picklist

Field Name	Details
	Properties Create, Filter, Group, Restricted picklist, Sort, Update **Description** Represents the default opportunity record access levels for users that are assigned to the territory. Values are: • `Private` • `Read Only` • `Read/Write`
`ParentTerritory2Id`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the territory's parent territory (if any). If the territory has no parent territory, this value is `null`.
`Territory2ModelId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the territory model that the territory belongs to.
`Territory2TypeId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the territory type that the territory belongs to.

Territory2Model

Represents a territory model. Available only if Enterprise Territory Management has been enabled for your organization.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Summer '20 and later, only standard and partner users can access this object. If a territory model is in `Active` state, any standard or partner user can view that model, including its territories and assignment rules. For territories in an active model, any standard or partner user can view assigned records and assigned users subject to your org's sharing settings. Users cannot view territory models in other states (such as `Planning` or `Archived`).

Fields

Field Name	Details
`ActivatedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the territory model was activated.
`DeactivatedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the territory model was archived.
`Description`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The description of the territory model.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. The unique name of the object in the API. This name can contain only underscores and alphanumeric characters and must be unique in your organization. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. The field label in the user interface is `Territory Model Name`. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is

Field Name	Details
	specified, performance may slow while Salesforce generates one for each record.
LastOppTerrAssignEndDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Read-only. The date when the opportunity territory assignment filter was last run. Used for Filter-Based Opportunity Territory Assignment (Pilot in Spring '15 / API version 33).
LastRunRulesEndDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the last rules run was completed.
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The territory model name. The field label in the user interface is `Label`.
State	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The state of the territory model. Values are: `Planning`, `Activating`, `Activation Failed`, `Active`, `Archiving`, `Archiving Failed`, `Archived`, `Deleting`, and `Deletion Failed`.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

Territory2ModelFeed

Feed tracking is available for the object.

Territory2ModelHistory
History is available for tracked fields of the object.

Territory2ModelHistory

Represents the history of changes to the values in the fields on a territory model. Available only if Enterprise Territory Management has been enabled for your organization.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Fields

Field Name	Details
`DataType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Data type of the field that was changed.
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field whose value was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the changed field.
`OldValue`	**Type** anyType **Properties** Nillable, Sort

Field Name	Details
	Description The previous value of the changed field.
`Territory2ModelId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the territory model whose history is tracked.

Usage

This object is automatically generated whenever any field value changes on a territory model record. Use this object it to identify those changes.

Territory2Type

Represents a category for territories (Territory2). Every Territory2 must have a Territory2Type. Available only if Enterprise Territory Management has been enabled for your organization.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Summer '20 and later, only standard and partner users can access this object.

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The description of the territory type.
`DeveloperName`	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Sort, Update **Description** Required. The unique name of the object in the API. This name can contain only underscores and alphanumeric characters and must be unique in your organization. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. The field label in the user interface is `Territory Type Name`. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`Language`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the master label in the user interface.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required The user interface label for the territory type.
`Priority`	**Type** int **Properties** Create, Filter, Group, SortUpdate **Description** Required. Used for Filter-Based Opportunity Territory Assignment (Pilot in Spring '15 / API version 33). Lets you specify a priority for a territory type. For opportunity assignments, the filter examines all territories assigned to the account that the opportunity is assigned to. The account-assigned territory whose territory type priority is highest is then assigned to the opportunity. The `priority` field value on each territory type must be unique. Further, if there are multiple territories with the same territory type (and therefore the same priority) assigned to the account, no territory is assigned to the opportunity.

TestSuiteMembership

Associates an Apex class with an ApexTestSuite. This object is available in API version 36.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

The `enableApexTestReqViewSetup` field on the ApexSettings metadata type controls the activation of the critical update "Require View Setup permission to access Apex test data". In API version 49.0 and later, when the field is set to `true`, users must have the View Setup and Configuration permission to access this object.

Fields

Field Name	Description
ApexClassId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The Apex class whose tests are to be executed.
ApexTestSuiteId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The test suite to which the Apex class is assigned.

Usage

Insert a TestSuiteMembership object using an API call to associate an Apex class with an ApexTestSuite object. (ApexTestSuite and TestSuiteMembership aren't editable through Apex DML.) To remove the class from the test suite, delete the TestSuiteMembership object. If you delete an Apex test class or test suite, all TestSuiteMembership objects that contain that class or suite are deleted.

The following SOQL query returns the membership object that relates this Apex class to this test suite.

```
SELECT Id FROM TestSuiteMembership WHERE ApexClassId = '01pD0000000Fhy9IAC'
    AND ApexTestSuiteId = '05FD00000004CDBMA2'
```

SEE ALSO:

ApexTestSuite

ThirdPartyAccountLink

Represents the list of external users who authenticated using an Auth. Provider. This object is available in API version 32.0 and later.

A list of third-party account links is generated when users of an organization authenticate using an external Auth. Provider. Use this object to list and revoke a given user's social sign-on connections (such as Facebook©).

Supported Calls

`describeSObjects()`, `query()`

Fields

Field Name	Details
`Handle`	**Type** string **Properties** Filter, Nillable, Sort **Description** The username in the third-party system.
`IsNotSsoUsable`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Support for single sign-on. If *`true`*, the link cannot be used for a single sign-on flow. It is only available OAuth access and refresh tokens.
`Provider`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The third-party account provider name.
RemoteIdentifier	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The unique ID for the user in the third-party system.
SsoProvider	**Type** AuthProvider **Properties** Filter, Group, Nillable, Sort **Description** The foreign key to the AuthProvider on page 496 of the third-party system.
SsoProviderId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID associated with the SsoProvider value.
SsoProviderName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name associated with the AuthProvider of the third-party system, in case the user has no access to the provider foreign key (the SsoProvider value).
ThirdPartyAccountLinkKey	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A concatenated string including the organization ID, the SsoProviderId value, the SsoProvider value, and the RemoteIdentifier value.
UserId	**Type** reference

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The Salesforce user associated with this third-party account link.

Usage

Administrators (with the “Manage Users” permission) querying this object can see all the links for all users in the organization. Without the “Manage Users” permission, users can only retrieve their own links. A user might not have access to the `SsoProvider` value (the foreign key). In this case, use the `SsoProviderName` to render the name of the provider for the associated link.

Use the Apex method `Auth.AuthToken.revokeAccess()` to revoke a link.

To make the ThirdPartyAccountLink standard object writable for Salesforce admins, contact Salesforce Customer Support. With this feature, you can easily add or delete third-party account links using the API, but you can’t update existing account links.

In API version 34.0 and later, this object was enhanced to help manage high instance counts. A `query()` call returns up to 500 rows. A `queryMore()` call returns 500 more, up to 2500 total. No more records are returned after 2500. To make sure that you don’t miss any records, issue a `COUNT()` query in a SELECT clause for ThirdPartyAccountLink. This query gives you the total number of records. If there are more than 2500 records, divide your query by filtering on fields, like `UserId`, to return subsets of less than 2500 records.

ThreatDetectionFeedback

Represents feedback provided by a user about a Threat Detection event that occurred in your org. The feedback specifies whether the event was malicious, suspicious, not a threat, or unknown. Each ThreatDetectionFeedback object is associated with one of these Threat Detection storage events: CredentialStuffingEventStore, ReportAnomalyEventStore, or SessionHijackingEventStore. This object is available in API version 49.0 and later.

Supported Calls

`create()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `update()`, `upsert()`

Fields

Field	Details
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.

Field	Details
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, it's possible that this record was referenced (LastReferencedDate) and not viewed.
Response	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Describes the severity of the threat. Possible values are: • Malicious • Not a Threat • Suspicious • Unknown
ThreatDetectionEventId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Reference to the unique ID of one of these associated Threat Detection storage events: • CredentialStuffingEventStore • ReportAnomalyEventStore • SessionHijackingEventStore For example, 0fjRM000000005p.
ThreatDetectionFeedbackNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** Auto-generated number used as the unique name for this object.
UserId	**Type** reference

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The origin user's unique ID. For example, `005000000000123`.
`Username`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The origin username in the format of `user@company.com` at the time the object was created.

Associated Object

This object has the following associated object. It's available in the same API version as this object.

ThreatDetectionFeedbackFeed
Feed tracking is available for the object.

SEE ALSO:

Salesforce Help: Threat Detection

TimeSheet

Represents a schedule of a service resource's time in field service. This object is available in API v47.0 and later.

Time sheets are composed of time sheet entries, which typically track individual tasks like travel or asset repair.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
CurrencyIsoCode	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only if the multicurrency feature is enabled. Contains the ISO code for any currency allowed by the organization. The label in the user interface is `Currency ISO Code`.
EndDate	**Type** date **Properties** Create, Filter, Group, Sort, Update **Description** The last day the time sheet covers.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (`LastReferencedDate`) but not viewed it.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The owner of the time sheet.

Field Name	Details
ServiceResourceId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The service resource whose time is being tracked with the time sheet.
StartDate	**Type** date **Properties** Create, Filter, Group, Sort, Update **Description** The first day the time sheet covers.
Status	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The status of the time sheet. The picklist includes the following values, which can be customized: • New • Submitted • Approved
TimeSheetEntryCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** (Read Only) The number of related time sheet entries.
TimeSheetNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** An auto-generated number identifying the time sheet.
TotalDurationInHours	**Type** double

Field Name	Details
	Properties Filter, Nillable, Sort **Description** Represents the sum total of the duration field of all the time sheet entries related to the time sheet object in hours.
`TotalDurationInMinutes`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Represents the sum total of the duration field of all the time sheet entries related to the time sheet object in minutes.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

TimeSheetFeed
Feed tracking is available for the object.

TimeSheetHistory
History is available for tracked fields of the object.

TimeSheetOwnerSharingRule
Sharing rules are available for the object.

TimeSheetShare
Sharing is available for the object.

TimeSheetEntry

Represents a span of time that a service resource spends on a field service task. This object is available in API version 47.0 and later.

Time sheets are composed of time sheet entries. Time sheet entries typically track individual tasks like travel or asset repair.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
CurrencyIsoCode	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only if the multicurrency feature is enabled. Contains the ISO code for any currency allowed by the organization. The label in the user interface is `Currency ISO Code`. Time sheet entries inherit their time sheet's currency code. Updates to a time sheet's currency code aren't reflected in existing time sheet entries' currency code.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** Notes on how the time was spent. For example, "This service took longer than normal because the machine was jammed."
DurationInMinutes	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Minutes recorded on the time sheet entry.
EndTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date and time the activity finished.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort

Field Name	Details
	Description The timestamp when the current user last accessed this record, a record related to this record, or a list view.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is null, the user might have only accessed this record or list view (`LastReferencedDate`) but not viewed it.
`LocationTimeZone`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Time zone of the location where the activity occurred. This field is available in API version 50.0 and later.
`StartTime`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date and time the activity began.
`Status`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The status of the time sheet entry. The picklist includes the following values, which can be customized: • New • Submitted • Approved
`Subject`	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** Activity performed; for example, repair, lunch, or travel.
TimeSheetEntryNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** An auto-generated number identifying the time sheet entry.
TimeSheetId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The time sheet associated with the time sheet entry.
Type	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The type of work performed. The picklist includes the following values, which can be customized: • Direct • Indirect
WorkOrderId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The work order related to the time sheet entry. Work orders are searchable by their content.
WorkOrderLineItemId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description The work order line item related to the time sheet entry. Work order line items are searchable by their content.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

TimeSheetEntryFeed
Feed tracking is available for the object.

TimeSheetEntryHistory
History is available for tracked fields of the object.

TimeSlot

Represents a period of time on a specified day of the week during which field service work can be performed in Field Service and Lightning Scheduler. Operating hours consist of one or more time slots. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`DayOfWeek`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** The day of the week when the time slot takes place.
`EndTime`	**Type** time **Properties** Create, Filter, Sort, Update **Description** The time when the time slot ends.

Field Name	Details
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
MaxAppointments	**Type** int **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** Maximum number of appointments for a single time slot. Available in API version 47.0 and later.
OperatingHoursId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The operating hours that the time slot belongs to. An operating hours' time slots appear in the Operating Hours related list.
StartTime	**Type** time **Properties** Create, Filter, Sort, Update **Description** The time when the time slot starts.
TimeSlotNumber	**Type** string

Field Name	Details
	Properties Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name of the time slot. The name is auto-populated to a day and time format—for example, `Monday 9:00 AM - 10:00 PM`—but you can manually update it if you wish.
`Type`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of time slot. Possible values are *`Normal`* and *`Extended`*. You may choose to use *`Extended`* to represent overtime shifts.
`WorkTypeGroupId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Work type group assigned to the time slot. Available in API version 47.0 and later.

Usage

Operating hours are composed of time slots, which indicate the hours of operation for a particular day. After you create operating hours, create time slots for each day. For example, if the operating hours should be 8 AM to 5 PM Monday through Friday, create five time slots, one per day. To reflect breaks such as lunch hours, create multiple time slots in a day: for example, *`Monday 8:00 AM - 12:00 PM`* and *`Monday 1:00 PM - 5:00 PM`*.

Tip: Time slots don't come with any built-in rules, but you can create Apex triggers that limit time slot settings in your org. For example, you may want to restrict the start and end times on time slots to half-hour increments, or to prohibit end times later than 8 PM.

TimeSlotHistory

Represents the history of changes made to tracked fields on a time slot. This object is available in API version 38.0 and later.

Supported Calls

`getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Special Access Rules

Field Service must be enabled in your organization, and field tracking for time slot fields must be configured.

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The value of the field before it was changed.
`TimeSlotId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the time slot being tracked. The history is displayed on the detail page for this record.

Topic

Represents a topic on a Chatter post or record. This object is available in API version 28.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Fields

Field Name	Details
`Description`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the topic.
`ManagedTopicType`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Type of managed topic. Values are: • `Content` • `Featured` • `Navigational` This field is available in API version 44.0 and later.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update Note: You can change only the spacing and capitalization of a topic name with the update property. **Description** Name of the topic.
`NetworkId`	**Type** reference **Properties** Create, Filter, Nillable, Sort **Description** Identifier of the Experience Cloud site to which the topic belongs. This field is available only if digital experiences is enabled in your org.

Field Name	Details
`TalkingAbout`	**Type** int **Properties** Filter, Group, Sort **Description** Number of people talking about the topic over the last two months, based on factors such as topic additions and comments on posts with the topic.

Usage

Use this object to query a specific topic or to get a list of all topics, even those used solely in private groups and on records, and the number of people talking about them.

Use this object to create, edit, or delete topics. To create a topic, you must have the Create Topics permission. To edit a topic, you must have the Edit Topics permission. To delete a topic, you must have the Delete Topics or Modify All Data permission.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

TopicFeed (API version 29.0)
Feed tracking is available for the object.

TopicAssignment

Represents the assignment of a topic to a specific feed item, record, or file. This object is available in API version 28.0 and later.

Administrators must enable topics for objects before users can add topics to records of that object type. Topics for most objects are available in API version 30.0 and later. Topics for ContentDocument are available in API version 37.0 and later.

Supported Calls

`create()`, `describeSObjects()`, `delete()`, `getDeleted()`, `getUpdate()`, `query()`, `retrieve()`

Fields

Field Name	Details
`EntityId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Identifier of the feed item, record, or file.

Field Name	Details
`EntityKeyPrefix`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The first three digits of the `EntityID` field, which identify the object type (account, opportunity, etc). This read-only field is available in API version 32.0 and later. Interface label is “Record Key Prefix,” which appears only in reports.
`EntityType`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The standard name for the object type (account, opportunity, etc). This read-only field is available in API version 33.0 and later. Note: Querying topic assignments for the ManagedContentVersion entity type isn’t supported. Interface label is “Object Type,” which appears only in reports. Tip: In most cases, you should use this field rather than `EntityKeyPrefix`, which exists primarily to support older reports.
`NetworkId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** Identifier of the community to which the TopicAssignment belongs. This field is available only if digital experiences is enabled in your org.
`TopicId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Identifier of the topic.

Usage

Use this object to query the assignments of topics to feed items, records, or files. To assign or remove topics, you must have the "Assign Topics" permission.

In SOQL `SELECT` syntax, this object supports nested semi-joins, allowing queries on Knowledge articles assigned to specific topics. For example:

```
SELECT parentId FROM KnowledgeArticleViewStat
    WHERE parentId in (SELECT KnowledgeArticleId FROM KnowledgeArticleVersion
    WHERE publishStatus = 'Online' AND language = 'en_US'
    AND  Id in (select EntityId from TopicAssignment where TopicId ='0T0xx0000000xxx'))
```

No SOQL limit if logged-in user has "View All Data" permission. If not, do one of the following:

- Specify a LIMIT clause of 1,100 records or fewer.
- Filter on `Id` or `Entity` when using a `WHERE` clause with "=".

SEE ALSO:

Topic

FeedItem

TopicLocalization

Represents the translated version of a topic name. Topic localization applies only to navigational and featured topics in Experience Cloud sites. This object is available in API version 33.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Users with the Translation Workbench enabled can view topic translations, but the Customize Application, Manage Translation, or Manage Categories permission is required to create or update them.

Fields

Field Name	Details
`Language`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort

Field Name	Details
	Description The combined language and locale ISO code, which controls the language for labels displayed in an application. (The values in this field are not related to the default locale selection.) This picklist contains the following fully-supported languages: • Chinese (Simplified): `zh_CN` • Chinese (Traditional): `zh_TW` • Danish: `da` • Dutch: `nl_NL` • English: `en_US` • Finnish: `fi` • French: `fr` • German: `de` • Italian: `it` • Japanese: `ja` • Korean: `ko` • Norwegian: `no` • Portuguese (Brazil): `pt_BR` • Russian: `ru` • Spanish: `es` • Spanish (Mexico): `es_MX` Spanish (Mexico) defaults to Spanish for customer-defined translations. • Swedish: `sv` • Thai: `th` The Salesforce user interface is fully translated to Thai, but Help is in English. The following end-user only languages are available. • Arabic: `ar` • Bulgarian: `bg` • Croatian: `hr` • Czech: `cs` • English (UK): `en_GB` • Greek: `el` • Hebrew: `iw` • Hungarian: `hu` • Indonesian: `in` • Polish: `pl` • Portuguese (European): `pt_PT` • Romanian: `ro`

Field Name	Details
	• Slovak: `sk` • Slovenian: `sl` • Turkish: `tr` • Ukrainian: `uk` • Vietnamese: `vi` The following platform languages are available for organizations that use Salesforce exclusively as a platform. • Albanian: `sq` • Afrikaans: `af` • Amharic: `am` • Arabic (Algeria): `ar_DZ` • Arabic (Bahrain): `ar_BH` • Arabic (Egypt): `ar_EG` • Arabic (Iraq): `ar_IQ` • Arabic (Jordan): `ar_JO` • Arabic (Kuwait): `ar_KW` • Arabic (Lebanon): `ar_LB` • Arabic (Libya): `ar_LY` • Arabic (Morocco): `ar_MA` • Arabic (Oman): `ar_OM` • Arabic (Qatar): `ar_QA` • Arabic (Saudi Arabia): `ar_SA` • Arabic (Sudan): `ar_SD` • Arabic (Syria): `ar_SY` • Arabic (Tunisia): `ar_TN` • Arabic (United Arab Emirates): `ar_AE` • Arabic (Yemen): `ar_YE` • Armenian: `hy` • Basque: `eu` • Bosnian: `bs` • Bengali: `bn` • Burmese: `my` • Catalan: `ca` • Chinese (Hong Kong): `zh_HK` • Chinese (Singapore): `zh_SG` • Dutch (Belgium): `nl_BE` • English (Australia): `en_AU` • English (Canada): `en_CA`

Field Name	Details
	• English (Hong Kong): en_HK • English (India): en_IN • English (Ireland): en_IE • English (Malaysia): en_MY • English (New Zealand): en_NZ • English (Philippines): en_PH • English (Singapore): en_SG • English (South Africa): en_ZA • Estonian: et • Farsi: fa • French (Belgium): fr_BE • French (Canada): fr_CA • French (Luxembourg): fr_LU • French (Switzerland): fr_CH • Georgian: ka • German (Austria): de_AT • German (Belgium): de_BE • German (Luxembourg): de_LU • German (Switzerland): de_CH • Gujarati: gu • Hindi: hi • Icelandic: is • Irish: ga • Italian (Switzerland): it_CH • Kannada: kn • Khmer: km • Latvian: lv • Lithuanian: lt • Luxembourgish: lb • Macedonian: mk • Malay: ms • Malayalam: ml • Maltese: mt • Marathi: mr • Montenegrin: sh_ME • Romanian (Moldova): ro_MD • Romansh: rm • Serbian (Cyrillic): sr

Field Name	Details
	• Serbian (Latin): `sh` • Spanish (Argentina): `es_AR` • Spanish (Bolivia): `es_BO` • Spanish (Chile): `es_CL` • Spanish (Colombia): `es_CO` • Spanish (Costa Rica): `es_CR` • Spanish (Dominican Republic): `es_DO` • Spanish (Ecuador): `es_EC` • Spanish (El Salvador): `es_SV` • Spanish (Guatemala): `es_GT` • Spanish (Honduras): `es_HN` • Spanish (Nicaragua): `es_NI` • Spanish (Panama): `es_PA` • Spanish (Paraguay): `es_PY` • Spanish (Peru): `es_PE` • Spanish (Puerto Rico): `es_PR` • Spanish (United States): `es_US` • Spanish (Uruguay): `es_UY` • Spanish (Venezuela): `es_VE` • Swahili: `sw` • Tagalog: `tl` • Tamil: `ta` • Te reo: `mi` • Telugu: `te` • Urdu: `ur` • Welsh: `cy` • Xhosa: `xh` • Zulu: `zu`
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values.

Field Name	Details
	• In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID that identifies the topic. After a TopicLocalization record is created, this ID can't be modified.
`Value`	**Type** string **Properties** Create, Filter, Sort, Update **Description** The translated text for the topic name. Label is **Topic Name Translation**.

TopicUserEvent

Represents an action (such as comment, post, like, or share) made by a user on a topic. This object is available in API version 42.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Only users with the Modify All Data permission can view and delete these data.

Fields

Field	Details
ActionEnum	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The action taken by a user on a topic. The possible values are: • LIKE • COMMENT • POST • ASSIGN • SHARE • FAVORITE • UNFAVORITE • AT_MENTION • BANG_MENTION • COMMENT_LIKE • USER_ENDORSEMENT • SKILL_PEER_ENDORSEMENT • SKILL_SELF_ENDORSEMENT • BEST_ANSWER
NetworkId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the Experience Cloud site where the action was performed.
TopicId	**Type** reference **Properties** Filter, Group, Sort **Description** Identifier of the topic.
UserId	**Type** reference

Field	Details
	Properties Filter, Group, Sort **Description** Unique Salesforce user ID.

Usage

Use the TopicUserEvent object to delete topic-related activities by Experience Cloud site users who would like all their topic-related activities to be removed from a site.

TransactionSecurityPolicy

Represents a transaction security policy definition.

This object is available in API version 42.0 and later.

Supported Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`ActionConfig`	**Type** textarea **Properties** Create, Update **Description** Describes the action to take when the matching Transaction Security policy is triggered. Also indicates the type of notifications selected and the ID of the intended recipient. The recipient must be active and assigned the Modify All Data and View Setup user permissions. Multiple actions can be taken. The actions available depend on the `Event Type` field.
`ApexPolicyId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Represents the Apex `TxnSecurity.PolicyCondition` or `TxnSecurity.EventCondition` interface for this policy.

Field	Details
BlockMessage	**Type** string **Properties** Create,Filter, Nillable, Sort, Update **Description** The custom message sent to a user when a policy blocks their action. Used in Real-Time Event Monitoring only. Maximum of 1000 characters. This field is null when the default message option is selected in the UI. Available only when `EventName` is set to `ApiEvent`, `ListViewEvent`, `BulkApiResultEventStore`, or `ReportEvent`. Available in API version 49.0 and later. Include org- or policy-specific information in your custom message, such as the name of the responsible administrator or the business unit. Be careful about what you include. Too much information on how the policy was designed. can aid a malicious user. Two-factor authentication (2FA) isn't supported in Lightning Experience, so events like `ListView` and `ReportEvent` are upgraded to Block in Lightning. Custom messages aren't translatable.
Description	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** The description entered for this policy.
DeveloperName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The API, or program name, for this policy.
EventName	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Used in Real-Time Event Monitoring only. Indicates the name of the event the policy monitors. Valid values are: • `ApiEvent`—Tracks these user-initiated read-only API calls: `query()`, `queryMore()`, and `count()`. Captures API requests through SOAP API, REST API, and Bulk API for the Enterprise and Partner WSDLs. Tooling API calls and API calls originating from a Salesforce mobile app aren't captured.

Field	Details
	• `ApiAnomalyEventStore`—Tracks anomalies in how users make API calls. ApiAnomalyEventStore is an object that stores the event data of `ApiAnomalyEvent`. This object is available in API version 50.0 and later. • `BulkApiResultEventStore`—Tracks when a user downloads the results of a Bulk API request. `BulkApiResultEventStore` is a big object that stores the event data of `BulkApiResultEvent`. This object is available in API version 50.0 and later. • `CredentialStuffingEventStore`—Tracks when a user successfully logs into Salesforce during an identified credential stuffing attack. Credential stuffing refers to large-scale automated login requests using stolen user credentials. This value is available in API 49.0 and later. • `ListViewEvent`—Tracks when users access data with list views using Lightning Experience, Salesforce Classic, or the API. It doesn't track list views of Setup entities. • `LoginEvent`—LoginEvent tracks the login activity of users who log in to Salesforce. • `ReportAnomalyEventStore`—Tracks anomalies in how users run or export reports, including unsaved reports. This value is available in API 49.0 and later. • `ReportEvent`—Tracks when reports are run in your org. • `SessionHijackingEventStore`—Tracks when unauthorized users gain ownership of a Salesforce user's session with a stolen session identifier. To detect such an event, Salesforce evaluates how significantly a user's current browser fingerprint diverges from the previously known fingerprint using a probabilistically inferred significance of change. This value is available in API 49.0 and later.
`EventType`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Used in Legacy Transaction Security only. Indicates the type of event the policy monitors. Valid values are: • `AccessResource`—Notifies you when the selected resource has been accessed. • `AuditTrail`—Reserved for future use. • `DataExport`—Notifies you when any API query is made, such as from the Data Loader API client, or when a Report export occurs. • `Entity`—Notifies you on use of an object type such as an authentication provider or chatter post. • `Login`—Notifies you when a user logs in.
`ExecutionUserId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description Used in Legacy Transaction Security only. The ID of an active user who is assigned the Modify All Data and View Setup user permissions.
MasterLabel	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The policy's name.
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, NamespacePrefix is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects.
ResourceName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Used in Legacy Transaction Security only. A resource used to narrow down the conditions under which the policy triggers. For example, with a DataExport event, you can select a resource Lead to specifically monitor export activity occurring on your Lead entities. The resources available depend on the EventType field.
State	**Type** picklist

Field	Details
	Properties Create, Filter, Group, Restricted picklist, Sort, Update **Description** Indicates whether the policy is active. Valid values are: • `Disabled` • `Enabled`
`Type`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of validation that the policy uses. The valid values are: • `CustomApexPolicy`— Created with Apex editor. • `CustomConditionBuilderPolicy`— Created with Condition Builder .

Translation

The Translation object represents the languages enabled for translation in your Salesforce org. This object is available in API version 47.0 and later.

Supported Calls

`create()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- Your organization must be using Enterprise, Performance, Unlimited, or Developer edition.
- To view this object, you must have the "View Setup and Configuration" permission.
- To use the `create()`, `update()`, and `upsert()` calls, Translation Workbench must be enabled in your org.
- To manage translations, Translation Workbench must be enabled in your org. Specify translators for each language through the Translation Language Settings Setup page.

Fields

Field	Details
`CanManage`	**Type** boolean

Field	Details
	Properties Defaulted on create, Filter, Group, Sort **Description** Indicates whether the language is available for translation (`true`) or not (`false`). Specify translators for each language through the Translation Language Setup page.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the translated values for this language display to users (`true`) or not (`false`).
`Language`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The language code. See the Salesforce Help for a full list of languages and their codes.

SEE ALSO:

Supported Languages

TwoFactorInfo

Stores a user's secret for multi-factor operations. Use this object when customizing multi-factor authentication in your organization. (Note that multi-factor authentication was formerly called two-factor authentication.) This object is available in API version 32.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

You need the Manage Multi-Factor Authentication in API permission to create or update this object.

Fields

Field Name	Details
`SharedKey`	**Type** string **Properties** Create, Group, Sort, Update **Description** This field is never read-enabled, though it is write-enabled. A request for this value always returns `null`. The value must be a base32-encoded string of a 20-byte secret. You can use the Apex method `Auth.SessionManagement.getQrCode()` to get a value to write to this field. Note: If you write a secret to this field, in API version 37.0 and later the user gets an email notification that a new identity verification method was added to the user's account.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The multi-factor method. • `TOTP`—The time-based one-time password.
`UserId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID for the user who's associated with the authentication secret.

TwoFactorMethodsInfo

Stores information about which identity verification methods a user has registered. This object is available in API version 37.0 and later.

Supported Calls

`describeSObjects()`, `query()`

Special Access Rules

You need the Manage Multi-Factor Authentication in API permission to access this object. (Note that multi-factor authentication was formerly called two-factor authentication.)

Fields

Field Name	Details
`ExternalId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A unique system-generated numerical identifier for the user.
`HasSalesforceAuthenticator`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, the user has connected the Salesforce Authenticator mobile app. The user can verify identity by approving a notification sent to the app. If the user sets a trusted location in the app, Salesforce Authenticator verifies automatically when the user is in the trusted location.
`HasTempCode`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, the user has a temporary verification code generated by a Salesforce admin or user with Manage Multi-Factor Authentication in User Interface permission.
`HasTotp`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, the user has connected an authenticator app that generates verification codes, also known as time-based one-time passwords (TOTP). The user can verify identity by entering a code generated by the app.

Field Name	Details
HasU2F	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, the user has registered a U2F security key. The user can verify identity by inserting the security key into a USB port to generate credentials.
HasUserVerifiedEmailAddress	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, the user has self-registered and verified an email address. This parameter is available in API version 43 and later.
HasUserVerifiedMobileNumber	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, the user has self-registered and verified a mobile phone number. Salesforce can text a verification code to the user at that number. This parameter is available in API version 43 and later.
HasVerifiedMobileNumber	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, the user has a mobile phone number that was added by an administrator or self-registered by the user. Salesforce can text a verification code to the user at that number.
UserId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the user who's associated with the identity verification methods.

TwoFactorTempCode

Stores information about a user's temporary verification code for confirming their identity when logging in. This object is available in API version 37.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

You need the Manage Multi-Factor Authentication in API permission to access this object. (Note that multi-factor authentication was formerly called two-factor authentication.)

Fields

Field Name	Details
`Expiration`	**Type** dateTime **Properties** Filter, Sort **Description** The date and time when the temporary verification code expires. The code expires in 1 to 24 hours after it's generated. Salesforce admins and non-admin users with the Manage Multi-Factor Authentication in User Interface permission set the expiration time when generating the code.
`Identifier`	**Type** string **Properties** Filter, Group, Sort **Description** The unique identifier for the temporary code. This is a required field that can take any value.
`TempCode`	**Type** encryptedstring **Description** A request for this value always returns `null`.
`UserId`	**Type** reference

Field Name	Details
	Properties Filter, Group, Sort **Description** The ID for the user who's associated with the temporary verification code.

UiFormulaCriterion

Represents a filter that helps define component visibility on a Lightning page. This object is available in API version 47.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`LeftHandSide`	**Type** string **Properties** Filter, Group, Sort **Description** Represents the field that the filter is based on. For example, `AMOUNT`.
`OperatorId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Represents the filter operator. Valid values are: • `CONTAINS` • `EQUAL` • `GE`—greater than or equal • `GT`—greater than • `LE`—less than or equal • `LT`—less than • `NE`—not equal
`ParentKeyPrefix`	**Type** string

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** Represents the three-digit prefix of the parent ID.
`RightHandSide`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Represents the value used to evaluate the component's visibility. For example, 1000000.
`RuleId`	**Type** reference **Properties** Filter, Group, Sort **Description** Represents the formula rule ID.

UiFormulaRule

Represents a set of one or more filters that define the conditions under which a component displays on a Lightning page. This object is available in API version 47.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`AssociatedElementId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Represents a parent component that UiFormulaRule is associated with, such as PromptVersion.

Field	Details
BooleanFilter	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Represents the filter logic applied to UiFormulaRule. References the UI formula rule stored by UiFormulaCriterion based on the sortIndex, such as ((1 && 3) || 2).
DeveloperName	**Type** string **Properties** Filter, Group, Sort **Description** Represents the API name of the UiFormulaRule.
Formula	**Type** textarea **Properties** Nillable **Description** Represents the formula source string of UiFormulaRule.
Language	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Represents the language of the UiFormulaRule.
MasterLabel	**Type** string **Properties** Filter, Group, Sort **Description** Required. Represents the label of the UiFormulaRule.
ParentKeyPrefix	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description Represents the three-digit prefix for AssociatedElementId.

UndecidedEventRelation

Represents event participants (invitees or attendees) with the status `Not Responded` for a given event. This object is available in API versions 29.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`EventId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the event.
`RelationId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the invitee.
`RespondedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** This field is always `null`.
`Response`	**Type** string

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** Indicates the content of the response field. Label is `Comment`.
`Type`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Indicates whether the invitee is a user, lead or contact, or resource.

Usage

Query invitees who have not responded to an invitation to an event

```
SELECT eventId, type, response FROM UndecidedEventRelation WHERE
eventid='00UTD000000ZH5LA'
```

SEE ALSO:

AcceptedEventRelation

DeclinedEventRelation

User

Represents a user in your organization.

Supported Calls

`create()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

- To create or update a User record, you must have the Manage Internal Users permission. If the user is a Customer Portal user, you must have the Manage Customer Users permission. If the user is a partner portal user, you must have the Manage External Users permission. But the `describeSObjects` call always returns `createable` as `true`.
- If digital experiences is enabled, to create or update external users for Customer Portal, partner portal, or Experience Cloud sites, you must also have the Manage External Users permission.
- Information in hidden fields in a user's profile isn't searchable by external users (with a portal profile) in an Experience Cloud site. For example, if a user in a site has a hidden email address and an external user searches for it, the user record isn't returned in the search results. Hidden field values also aren't returned when external users perform searches on nonhidden fields. So if an external

user searches for a user's name (can't be hidden), any hidden field values associated with the user record such as a hidden email address aren't returned in the search results.

But internal users belonging to the same Experience Cloud site can search for and view hidden field values in search results.

- When requested by portal users, queries that look up to the User object, such as `owner.name` or `owner.email` sometimes don't return values when the portal user making the request doesn't have Read access to the User record being queried.

  The behavior depends on the number of domains associated with the lookup field. If the object can look up to more than one domain, `owner.name` returns a value, but other detail fields don't. For example, Case owner can look up to the User or Queue objects. In this case, portal users can see only the value of `owner.name`. Other User detail fields, such as `owner.email` or `owner.phone` don't return a value.

  If the object can look up to only a single domain, such as Account owner, then no detail fields return values, including `owner.name`.

- To change ownership of a record by updating its `OwnerId` field, you must have both the Transfer Record permission and Read access to the User record of the new record owner.
- To view the `NumberOfFailedLogins` field, you must have the Manage User permission.

Fields

Field	Details
`AboutMe`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Information about the user, such as areas of interest or skills. This field is available even if Chatter is disabled.
`AccountId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the Account associated with a Customer Portal user. This field is null for Salesforce users.
`Address` (beta)	**Type** address **Properties** Filter, Nillable **Description** The compound form of the address. Read-only. See Address Compound Fields for details on compound address fields.

Field	Details
Alias	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. The user's alias. For example, `jsmith`.
BadgeText	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The Experience Cloud site role, displayed on the user profile page just below the user name.
BannerPhotoUrl	**Type** url **Properties** Filter, Nillable, Sort **Description** The URL for the user's banner photo. This field is available in API version 36.0 and later.
CallCenterId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** If Salesforce CRM Call Center is enabled, represents the call center that this user is assigned to.
City	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The city associated with the user. Up to 40 characters allowed.
CommunityNickname	**Type** string **Properties** Create, Filter, Group, Sort, Update

Field	Details
	Description Name used to identify this user in the Experience Cloud site.
CompanyName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The name of the user's company.
ContactId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the Contact associated with this account. The contact must have a value in the AccountId field or an error occurs.
Country	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The country associated with the user. Up to 80 characters allowed.
CountryCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO country code associated with the user.
CurrentStatus	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Text that describes what the user is working on.

Field	Details
	Note: If you update this field, the API automatically adds a post of type `UserStatus` on the user's profile in Chatter. This field is deprecated in API version 25.0. To achieve similar behavior, post to the user directly by creating a FeedItem with the user's ParentId.
`DefaultCurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The user's default currency setting for new records. For example, if a user in France sets `DefaultCurrencyIsoCode` to euros, then that's their default currency. Only applicable for organizations that use multiple currencies.
`DefaultDivision`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** This record's default division. Only applicable if divisions are enabled.
`DefaultGroupNotificationFrequency`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. The default frequency for sending the user's Chatter group email notifications when the user joins groups. The valid values are: • `P`—Email on every post • `D`—Daily digests • `W`—Weekly digests • `N`—Never The default value is `N`. For Professional, Enterprise, Unlimited, and Developer Edition organizations that existed before API version 22.0, the default value remains `D`. This field is available in API version 21.0 and later.

Field	Details
DelegatedApproverId	**Type** reference **Properties** Create, Filter, Group, Nillable,Sort, Update **Description** Id of the user who is a delegated approver for this user.
Department	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The company department associated with the user.
DigestFrequency	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. The send frequency of the user's Chatter personal email digest. The valid values are: • D = Daily • W = Weekly • N = Never The default value is D.
Division	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The division associated with this user, similar to Department, and unrelated to DefaultDivision.
Email	**Type** email **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. The user's email address.

Field	Details
EmailEncodingKey	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. The email encoding for the user, such as `ISO-8859-1` or `UTF-8`.
EmailPreferencesAutoBcc	**Type** boolean **Properties** Create, Filter, Update **Description** Determines whether the user receives copies of sent emails. This option applies only if compliance BCC emails aren't enabled.
EmployeeNumber	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The user's employee number.
Extension	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The user's phone extension number.
Fax	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The user's fax number.
FederationIdentifier	**Type** string **Properties** Create, Filter, idLookup, Nillable, Sort, Update

Field	Details
	Description Indicates the value that must be listed in the `Subject` element of a Security Assertion Markup Language (SAML) *IDP certificate* to authenticate the user for a client application using single sign-on. This value must be specified if the `SAML User ID Type` is Assertion contains Federation ID from the User record. Otherwise, this field can't be edited.
`FirstName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The user's first name.
`ForecastEnabled`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the user is enabled as a forecast manager (`true`) or not (`false`). Forecast managers see forecast rollups from users below them in the forecast hierarchy.
`FullPhotoUrl`	**Type** url **Properties** Filter, Nillable, Sort **Description** The URL for the user's profile photo. This field is available even if Chatter is disabled. The URL is updated every time a photo is uploaded and reflects the most recent photo. If a newer photo is uploaded, the URL returned for an older photo isn't guaranteed to return a photo. Query this field for the URL of the most recent photo. This field is available in API version 20.0 and later.
`GeocodeAccuracy`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update

Field	Details
	Description The level of accuracy of a location's geographical coordinates compared with its physical address. A geocoding service typically provides this value based on the address's latitude and longitude coordinates.
`IndividualId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the data privacy record associated with this user. This field is available if Data Protection and Privacy is enabled.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the user has access to log in (`true`) or not (`false`). You can modify a User's active status from the user interface or via the API.
`IsPartner`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the user is a partner who has access to the partner portal (`true`) or not (`false`). This field isn't available for release 9.0 and later. Instead, use `UserType` with the value `Partner` or `Power Partner`.
`IsPortalEnabled`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the user has access to Experience Cloud sites or portals (`true`) or not (`false`). This field is only available if one of these conditions is true: • Digital experiences is enabled and you have community or portal user licenses

Field	Details
	• Portals are enabled
`IsPortalSelfRegistered`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Indicates whether the user is a Customer Portal user who self-registered for your organization's Customer Portal (`true`) or not (`false`). This field isn't available for release 9.0 and earlier.
`IsPrmSuperUser`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Available for partner portal users only. Indicates whether the user has super user access in the partner portal (`true`) or not (`false`). This field is available in API version 24.0 and later. Note: This field isn't automatically enabled. Contact Salesforce to enable this field.
`IsProfilePhotoActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a user has a profile photo (`true`) or not (`false`). This field is available in API version 36.0 and later.
`JigsawImportLimitOverride`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The Data.com user's monthly addition limit. The value must be between zero and the organization's monthly addition limit. Label is **Data.com Monthly Addition Limit**. This field is available in API version 27.0 and later.
`LanguageLocaleKey`	**Type** picklist

Field	Details
	Properties Create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. The user's language, such as French or Chinese (Traditional). Label is **Language**. Note: In API version 47.0 and later, when using the DescribeSObjectResult API to return PicklistEntry values from this picklist, the `active` value indicates whether the language is in the user's **Displayed Languages** (`true`) or the user's **Available Languages** (`false`). All other languages aren't in the returned `active` value array. In API version 46.0 and earlier, the PicklistEntry `active` values indicate whether the language is in either the user's **Displayed Languages** or **Available Languages** lists (`true`) or not in either list (`false`).
`LastLoginDate`	**Type** dateTime **Properties** Filter, Sort, Nillable **Description** The date and time when the user last successfully logged in. This value is updated if 60 seconds elapses since the user's last login.
`LastName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. The user's last name.
`LastReferencedDate`	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** datetime

Field	Details
	Properties Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, it's possible that this record was referenced (`LastReferencedDate`) but not viewed.
`Latitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `Longitude` to specify the geolocation of an address. Acceptable values are numbers between –90 and 90 up to 15 decimal places. For details on geolocation compound fields, see Compound Field Considerations and Limitations.
`LocaleSidKey`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. This field is a restricted picklist field. The value of the field affects formatting and parsing of values, especially numeric values, in the user interface. It doesn't affect the API. The field values are named according to the language, and the country if necessary, using two-letter ISO codes. The set of names is based on the ISO standard. You can also manually set a user's locale in the user interface, and then use that value for inserting or updating other users via the API.
`Longitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `Latitude` to specify the geolocation of an address. Acceptable values are numbers between –180 and 180 up to 15 decimal places. For details on geolocation compound fields, see Compound Field Considerations and Limitations.
`Manager`	**Type** picklist

Field	Details
	Properties Create, Filter, Restricted picklist, Update **Description** User lookup field used to select the user's manager. This field establishes a hierarchical relationship, preventing you from selecting a user that directly or indirectly reports to themselves.
ManagerId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The Id of the user who manages this user.
MediumBannerPhotoUrl	**Type** url **Properties** Filter, Nillable, Sort **Description** The URL for the medium-sized user profile banner photo.
MiddleName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The user’s middle name. Maximum size is 40 characters. To enable this field, contact Salesforce Customer Support .
MobilePhone	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The user’s mobile device number.
Name	**Type** string **Properties** Filter, Group, Sort

Field	Details
	Description Concatenation of `FirstName` and `LastName`. Limited to 203 characters, including whitespaces.
`NumberOfFailedLogins`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of failed login attempts for the user's account. When the maximum number of failed login attempts is reached, the counter resets and the user's account is locked. If there's a successful login before the maximum number of failed login attempts is reached, the counter resets and the user's account remains unlocked.
`OfflineTrialExpirationDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time when the user's Connect Offline trial expires.
`Phone`	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The user's phone number.
`PortalRole`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The role of the user in the Customer Portal (either Executive, Manager, User, or PersonAcount). Prior to API version 16.0, if you set this field to null, the system automatically included a portal role. In API version 16.0 and above, when you set this field to null, a portal role is not automatically created. When this field is null and a `ContactId` is provided, the user is assigned to the User role. The Update property is available in API version 43.0 and later.

Field	Details
	The field is available if Customer Portal is enabled OR digital experiences is enabled and Experience Cloud sites have available partner portal, Customer Portal, or High-Volume Portal User licenses.
`PostalCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The user's postal or ZIP code. Label is **Zip/Postal Code**.
`ProfileId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Required. ID of the user's Profile. Use this value to cache metadata based on profile. In earlier releases, this was `RoleId`.
`ReceivesAdminInfoEmails`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the user receives email for administrators from Salesforce (`true`) or not (`false`).
`ReceivesInfoEmails`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the user receives informational email from Salesforce (`true`) or not (`false`).
`SenderEmail`	**Type** email **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description The email address used as the From address when the user sends emails. This address is the same value shown in Setup on the My Email Settings page.
SenderName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The name used as the email sender when the user sends emails. This name is the same value shown in Setup on the My Email Settings page.
Signature	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** The signature text added to emails. This text is the same value shown in Setup on the My Email Settings page.
SmallBannerPhotoUrl	**Type** url **Properties** Filter, Nillable, Sort **Description** The URL for the small user profile banner photo.
SmallPhotoUrl	**Type** url **Properties** Filter, Nillable, Sort **Description** The URL for a thumbnail of the user's profile photo. This field is available even if Chatter is disabled. The URL is updated every time a photo is uploaded and reflects the most recent photo. If a newer photo is uploaded, the URL returned for an older photo isn’t guaranteed to return a photo. Query this field for the URL of the most recent photo. This field is available in API version 20.0 and later.

Field	Details
State	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The state associated with the User. Up to 80 characters allowed.
StateCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO state code associated with the user.
Street	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street address associated with the User.
Suffix	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The user's name suffix. Maximum size is 40 characters. To enable this field, contact Salesforce Customer Support.
TimeZoneSidKey	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. This field is a restricted picklist field. A User time zone affects the offset used when displaying or entering times in the user interface. But the API doesn't use a User time zone when querying or setting values. Values for this field are named using region and key city, according to ISO standards. You can also manually set one User time zone in the user interface, and then use that value for creating or updating other User records via the API.

Field	Details
Title	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The user's business title, such as Vice President.
Username	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. Contains the name that a user enters to log in to the API or the user interface. The value for this field must be in the form of an email address, using all lowercase characters. It must also be unique across all organizations. If you try to create or update a User with a duplicate value for this field, the operation is rejected. Each inserted User also counts as a license. Every organization has a maximum number of licenses. If you attempt to exceed the maximum number of licenses by inserting User records, the create request is rejected.
UserPermissionsCallCenterAutoLogin	**Type** boolean **Properties** Create, Filter, Update **Description** Required if Salesforce CRM Call Center is enabled. Indicates whether the user is enabled to use the auto login feature of the call center (`true`) or not (`false`).
UserPermissionsChatterAnswersUser	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates whether the portal user is enabled to use the Chatter Answers feature (`true`) or not (`false`). This field defaults to `false` when a Customer Portal user is created from the API.
UserPermissionsInteractionUser	**Type** boolean

Field	Details
	Properties Create, Filter, Update **Description** Indicates whether the user can run flows or not. Label is **Flow User**.
`UserPermissionsJigsawProspectingUser`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates whether the user is allocated one Data.com user license (`true`) or not (`false`). The Data.com user license lets the user add Data.com contact and lead records to Salesforce in supported editions. Label is **Data.com User**.
`UserPermissionsKnowledgeUser`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates whether the user is enabled to use Salesforce Knowledge (`true`) or not (`false`). Label is **Knowledge User**.
`UserPermissionsLiveAgentUser`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates whether the user is enabled to use Chat (`true`) or not (`false`). Label is **Live Agent User**.
`UserPermissionsMarketingUser`	**Type** boolean **Properties** Create, Filter, Update **Description** Required. Indicates whether the user is enabled to manage campaigns in the user interface (`true`) or not (`false`). Label is **Marketing User**.
`UserPermissionsOfflineUser`	**Type** boolean

Field	Details
	Properties Create, Filter, Update **Description** Required. Indicates whether the user is enabled to use Offline Edition (`true`) or not (`false`). Label is **Offline User**.
`UserPermissionsSFContentUser`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates whether the user is allocated one Salesforce CRM Content User License (`true`) or not (`false`). Label is **Salesforce CRM Content User**. The Salesforce CRM Content User license grants the user access to the Salesforce CRM Content application.
`UserPermissionsSiteforceContributorUser`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates whether the user is allocated one Site.com Contributor feature license (`true`) or not (`false`). Label is **Site.com Contributor User**. The Site.com Contributor feature license grants the user access to the Site.com application. Users with a Contributor license can use Site.com Studio to edit site content only.
`UserPermissionsSiteforcePublisherUser`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates whether the user is allocated one Site.com Publisher feature license (`true`) or not (`false`). Label is **Site.com Publisher User**. The Site.com Publisher feature license grants the user access to the Site.com application. Users with a Publisher license can build and style websites, control the layout and functionality of pages and page elements, and add and edit content.
`UserPermissionsSupportUser`	**Type** boolean **Properties** Create, Filter, Update

Field	Details
	Description When `true`, the user can use the Salesforce console.
`UserPermissionsWirelessUser`	**Type** boolean **Properties** Create, Filter, Update **Description** Required if the Wireless permission is enabled. Indicates whether the user is enabled to use Wireless Edition (`true`) or not (`false`). Label is **Wireless User**. Note: As of November 2005, Salesforce Wireless Edition is no longer available for purchase. You can continue to use Wireless Edition through the end of your existing contract term if you are: • A Professional Edition customer and purchased Wireless Edition before November 7, 2005. • An Enterprise Edition customer who signed or renewed their Salesforce contract before November 7, 2005.
`UserPermissionsWorkDotComUserFeature`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates whether the WDC feature is enabled for the user (`true`) or not (`false`).
`UserPreferencesActivityRemindersPopup`	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, a reminder window automatically opens when an activity reminder is due. Corresponds to the `Trigger alert when reminder comes due` checkbox at the Reminders page in the personal settings in the user interface.
`UserPreferencesApexPagesDeveloperMode`	**Type** boolean **Properties** Create, Filter, Update

Field	Details
	Description When `true`, indicates that the user has enabled developer mode for editing Visualforce pages and controllers.
`UserPreferencesContentEmailAsAndWhen`	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, a user with Salesforce CRM Content subscriptions receives a once-daily email summary if activity occurs on the subscribed content, libraries, tags, or authors. To receive email, the `UserPreferencesContentNoEmail` field must also be `false`. The default value is `false`. Note: This field is only visible when Salesforce CRM Content is enabled.
`UserPreferencesContentNoEmail`	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, a user with Salesforce CRM Content subscriptions receives email notifications if activity occurs on the subscribed content, libraries, tags, or authors. To receive real-time email alerts, set this field to `false` and set the `UserPreferencesContentEmailAsAndWhen` field to `true`. The default value is `false`. Note: This field is only visible when Salesforce CRM Content is enabled.
`UserPreferencesEnableAutoSubForFeeds`	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, the user automatically subscribes to feeds for any objects that the user creates. This field is available in API version 25.0 and later.
`UserPreferencesDisableAllFeedsEmail`	**Type** boolean

Field	Details
	Properties Create, Filter, Update **Description** When `false`, the user automatically receives email for all updates to Chatter feeds, based on the types of feed emails and digests the user has enabled. This field is available in API version 24.0 and later.
`UserPreferencesDisableAutoSubForFeeds`	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, the user automatically subscribes to feeds for any objects that the user creates. This field is deprecated in API version 25.0 and later. Starting with API version 25.0, use `UserPreferencesEnableAutoSubForFeeds` to enable or disable auto-follow for objects a user creates.
`UserPreferencesDisableBookmarkEmail`	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, the user automatically receives email every time someone comments on a Chatter feed item after the user has bookmarked it. This field is available in API version 24.0 and later.
`UserPreferencesDisableChangeCommentEmail`	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, the user automatically receives email every time someone comments on a change the user has made, such as an update to their profile. This field is available in API version 24.0 and later.
`UserPreferencesDisableEndorsementEmail`	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, the member automatically receives email every time someone endorses them for a topic.

Field	Details
UserPreferencesDisableFileShareNotificationsForApi	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, email notifications are sent from the person who shared the file to the users that the file is shared with. This field is available in API version 25.0 and later.
UserPreferencesDisableFollowersEmail	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, the user automatically receives email every time someone starts following the user in Chatter. This field is available in API version 24.0 and later.
UserPreferencesDisableLaterCommentEmail	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, the user automatically receives email every time someone comments on a feed item after the user has commented on the feed item. This field is available in API version 24.0 and later.
UserPreferencesDisableLikeEmail	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, the user automatically receives email every time someone likes their post or comment. This field is available in API version 24.0 and later.
UserPreferencesDisableMentionsPostEmail	**Type** boolean **Properties** Create, Filter, Update

Field	Details
	Description When `false`, the user automatically receives email every time they're mentioned in posts. This field is available in API version 24.0 and later.
UserPreferencesDisableProfilePostEmail	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, the user automatically receives email every time someone posts to the user's profile. This field is available in API version 24.0 and later.
UserPreferencesDisableSharePostEmail	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, the user automatically receives email every time their post is shared. This field is available in API version 24.0 and later.
UserPreferencesDisableFeedbackEmail	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, the user automatically receives emails related to WDC feedback. The user receives these emails when someone requests or offers feedback, shares feedback with the user, or reminds the user to answer a feedback request.
UserPreferencesDisCommentAfterLikeEmail	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, the user automatically receives email every time someone comments on a post that the user liked. This field is available in API version 24.0 and later.
UserPreferencesDisMentionsCommentEmail	**Type** boolean

Field	Details
	Properties Create, Filter, Update **Description** When `false`, the user automatically receives email every time the user is mentioned in comments. This field is available in API version 24.0 and later.
`UserPreferencesDisableMessageEmail`	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, the user automatically receives email for Chatter messages sent to the user. This field is available in API version 24.0 and later.
`UserPreferencesDisableRewardEmail`	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, the user automatically receives emails related to WDC rewards. The user receives these emails when someone gives a reward to the user.
`UserPreferencesDisableWorkEmail`	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, the user receives emails related to WDC feedback, goals, and coaching. The user must also sign up for individual emails listed on the WDC email settings page. When `true`, the user doesn't receive any emails related to WDC feedback, goals, or coaching even if they're signed up for individual emails.
`UserPreferencesDisProfPostCommentEmail`	**Type** boolean **Properties** Create, Filter, Update

Field	Details
	Description When `false`, the user automatically receives email every time someone comments on posts on the user's profile. This field is available in API version 24.0 and later.
`UserPreferencesEventRemindersCheckboxDefault`	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, a reminder popup is automatically set on the user's events. Corresponds to the `By default, set reminder on Events to...` checkbox on the Reminders page in the user interface. This field is related to UserPreference and customizing activity reminders.
`UserPreferencesHideBiggerPhotoCallout`	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, users can choose to hide the callout text below the large profile photo.
`UserPreferencesHideChatterOnboardingSplash`	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, the initial Chatter onboarding prompts don't appear.
`UserPreferencesHideCSNDesktopTask`	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, the Chatter recommendations panel never displays the recommendation to install Chatter Desktop. This field is available in API version 26.0 and later.
`UserPreferencesHideCSNGetChatterMobileTask`	**Type** boolean

Field	Details
	Properties Create, Filter, Update **Description** When `true`, the Chatter recommendations panel never displays the recommendation to install Chatter Mobile. This field is available in API version 26.0 and later.
UserPreferencesHideEndUserOnboardingAssistantModal	**Type** boolean **Properties** Create, Filter, Update **Description** Reserved for future use.
UserPreferencesHideLightningMigrationModal	**Type** boolean **Properties** Create, Filter, Update **Description** Reserved for future use.
UserPreferencesHideSecondChatterOnboardingSplash	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, the secondary Chatter onboarding prompts don't appear.
UserPreferencesHideS1BrowserUI	**Type** boolean **Properties** Create, Filter, Update **Description** Controls the interface that the user sees when logging in to Salesforce from a supported mobile browser. If `false`, the user is automatically redirected to the Salesforce mobile web. If `true`, the user sees the full Salesforce site. The default value is `false`. Label is **Salesforce User**. This field is available in API version 29.0 or later.
UserPreferencesHideSfxWelcomeMat	**Type** boolean

Field	Details
	Properties Create, Filter, Update **Description** Controls whether a user sees the Lightning Experience new user message. That message welcomes users to the new interface and provides step-by-step instructions that describe how to return to Salesforce Classic.
`UserPreferencesJigsawListUser`	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, the user is a Data.com List user so shares record additions from a pool. UserPermissionsJigsawProspectingUser must also be set to `true`. Label is **Data.com List User**. This field is available in API version 27.0 and later.
`UserPreferencesLightningExperiencePreferred`	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, redirects the user to the Lightning Experience interface. Label is **Switch to Lightning Experience**. This field is available in API version 35.0 and later.
`UserPreferencesNativeEmailClient`	**Type** boolean **Properties** Create, Filter, Update **Description** Use this field to set a default email preference for the user's native email client. This field is available in API version 47.0 and later. The default value is `false`, corresponding to the Salesforce docked email composer.
`UserPreferencesOptOutOfTouch`	**Type** boolean **Properties** Create, Filter, Update

Field	Details
	Description This field is deprecated in API version 29.0. When `false`, the user automatically accesses the Salesforce Touch app when logging in to Salesforce from an iPad. If `true`, automatic access to the Salesforce Touch app is turned off and the user's iPad is directed to the full Salesforce site instead. The default value is `false`. Note: Salesforce Touch must be enabled before this field is visible.
`UserPreferencesPathAssistantCollapsed`	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, Sales Path appears collapsed or hidden to the user. This field is available in API version 35.0 and later.
`UserPreferencesProcessAssistantCollapsed`	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, Sales Path appears collapsed or hidden to the user. This field is available in API versions 33.0 and 34.0 only. In API versions 35.0 and later, use `UserPreferencesPathAssistantCollapsed`.
`UserPreferencesReceiveNoNotificationsAsApprover`	**Type** boolean **Properties** Create, Filter, Update **Description** Controls email notifications from the approval process for *approvers*. • If `true`, emails are *disabled*. • If `false`, emails are *enabled*. The default value is `false`. Note: The `Receive Approval Request Emails` setting in the UI controls this field and the `UserPreferencesReceiveNotificationsAsDelegatedApprover` field. • Setting: **If I'm an approver or delegated approver** Result:

Field	Details
	– UserPreferencesReceiveNoNotificationsAsApprover = false – UserPreferencesReceiveNotificationsAsDelegatedApprover = true • Setting: **Only if I'm an approver** Result: – UserPreferencesReceiveNoNotificationsAsApprover = false – UserPreferencesReceiveNotificationsAsDelegatedApprover = false • Setting: **Only if I'm a delegated approver** Result: – UserPreferencesReceiveNoNotificationsAsApprover = true – UserPreferencesReceiveNotificationsAsDelegatedApprover = true • Setting: **Never** Result: – UserPreferencesReceiveNoNotificationsAsApprover = true – UserPreferencesReceiveNotificationsAsDelegatedApprover = false
`UserPreferencesReceiveNotificationsAsDelegatedApprover`	**Type** boolean **Properties** Create, Filter, Update **Description** Controls email notifications from the approval process for *delegated approvers*. • If `true`, emails are *enabled*. • If `false`, emails are *disabled*. The default value is `false`. Note: The `Receive Approval Request Emails` setting in the UI controls this field and the `UserPreferencesReceiveNoNotificationsAsApprover` field. • Setting: **If I'm an approver or delegated approver**

Field	Details
	Result: – UserPreferencesReceiveNoNotificationsAsApprover = false – UserPreferencesReceiveNotificationsAsDelegatedApprover = true • Setting: **Only if I'm an approver** Result: – UserPreferencesReceiveNoNotificationsAsApprover = false – UserPreferencesReceiveNotificationsAsDelegatedApprover = false • Setting: **Only if I'm a delegated approver** Result: – UserPreferencesReceiveNoNotificationsAsApprover = true – UserPreferencesReceiveNotificationsAsDelegatedApprover = true • Setting: **Never** Result: – UserPreferencesReceiveNoNotificationsAsApprover = true – UserPreferencesReceiveNotificationsAsDelegatedApprover = false
`UserPreferencesReminderSoundOff`	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, a sound automatically plays when an activity reminder is due. Corresponds to the `Play a reminder sound` checkbox on the Reminders page in the user interface.
`UserPreferencesShowCityToExternalUsers`	**Type** boolean **Properties** Create, Filter, Update

Field	Details
	Description Indicates the visibility of the city field in the user's contact information. City is visible only to internal members of the user's organization when: • This field is `false`. When `false`, this field returns the value `#N/A`. City is visible to external members in an Experience Cloud site when: • This field is `true`, or • This field is `false` but `UserPreferencesShowCityToGuestUsers` is `true`, which overrides this field's value. External users are users with Community, Customer Portal, or partner portal licenses. The default value is `false`. This field is available in API version 26.0 and later.
`UserPreferencesShowCityToGuestUsers`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the city field in the user's contact information. When `true`, city is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Experience Cloud sites, via the Guest User license associated with each site. When `false`, this field returns the value `#N/A`. When `true`, this field overrides the value `false` in `UserPreferencesShowCityToExternalUsers`, making the user's city visible to external members. The default value is `false`. This field is available in API version 28.0 and later.
`UserPreferencesShowCountryToExternalUsers`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the country field in the user's contact information. Country is visible only to internal members of the user's organization when: • This field is `false`. When `false`, this field returns the value `#N/A`. Country is visible to external members in an Experience Cloud site when:

Field	Details
	• This field is `true`, or • This field is `false` but `UserPreferencesShowCountryToGuestUsers` is `true`, which overrides this field's value. External users are users with Community, Customer Portal, or partner portal licenses. The default value is `false`. This field is available in API version 26.0 and later.
UserPreferencesShowCountryToGuestUsers	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the country field in the user's contact information. When `true`, country is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Experience Cloud sites, via the Guest User license associated with each site. When `false`, this field returns the value `#N/A`. When `true`, this field overrides the value `false` in `UserPreferencesShowCountryToExternalUsers`, making the user's country visible to external members. The default value is `false`. This field is available in API version 28.0 and later.
UserPreferencesShowEmailToExternalUsers	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the email address field in the user's contact information. Email address is visible only to internal members of the user's organization when this field is `false`. Email address is visible to external members in an Experience Cloud site when this field is `true`. External users are users with Community, Customer Portal, or partner portal licenses. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 26.0 and later.
UserPreferencesShowEmailToGuestUsers	**Type** boolean **Properties** Create, Filter, Update

Field	Details
	Description Indicates the visibility of the email address field in the user's contact information. When `true`, the email address is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Experience Cloud sites, via the Guest User license associated with each site. When `true`, this field overrides the value `false` in `UserPreferencesShowEmailToExternalUsers`, making the user's email address visible to guests. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 34.0 and later.
`UserPreferencesShowFaxToExternalUsers`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the fax number field in the user's contact information. Fax number is visible only to internal members of the user's organization when this field is `false`. Fax number is visible to external members in an Experience Cloud site when this field is `true`. External users are users with Community, Customer Portal, or partner portal licenses. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 26.0 and later.
`UserPreferencesShowFaxToGuestUsers`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the fax number field in the user's contact information. When `true`, the fax number field is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Experience Cloud sites, via the Guest User license associated with each site. When `true`, this field overrides the value `false` in `UserPreferencesShowFaxToExternalUsers`, making the user's fax number visible to guests. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 34.0 and later.

Field	Details
UserPreferencesShowManagerToExternalUsers	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the manager field in the user’s contact information. Manager is visible only to internal members of the user’s organization when this field is `false`. Manager is visible to external members in an Experience Cloud site when this field is `true`. External users are users with Community, Customer Portal, or partner portal licenses. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 26.0 and later.
UserPreferencesShowManagerToGuestUsers	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the manager field in the user’s contact information. When `true`, the manager field is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Experience Cloud sites, via the Guest User license associated with each site. When `true`, this field overrides the value `false` in `UserPreferencesShowManagerToExternalUsers`, making the user’s manager visible to guests. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 34.0 and later.
UserPreferencesShowMobilePhoneToExternalUsers	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the mobile device number field in the user’s contact information. The number is visible only to internal members of the user’s organization when this field is `false`. The number is visible to external members in an Experience Cloud site when this field is `true`. External users are users with Community, Customer Portal, or partner portal licenses. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 26.0 and later.

Field	Details
UserPreferencesShowMobilePhoneToGuestUsers	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the mobile phone field in the user's contact information. When `true`, the mobile phone field is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Experience Cloud sites, via the Guest User license associated with each site. When `true`, this field overrides the value `false` in `UserPreferencesShowMobilePhoneToExternalUsers`, making the user's mobile phone visible to guests. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 34.0 and later.
UserPreferencesShowPostalCodeToExternalUsers	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the postal or ZIP code field in the user's contact information. Postal code is visible only to internal members of the user's organization when: • This field is `false`. When `false`, this field returns the value `#N/A`. Postal code is visible to external members in an Experience Cloud site when: • This field is `true`, or • This field is `false` but `UserPreferencesShowPostalCodeToGuestUsers` is `true`, which overrides this field's value. External users are users with Community, Customer Portal, or partner portal licenses. The default value is `false`. This field is available in API version 26.0 and later.
UserPreferencesShowPostalCodeToGuestUsers	**Type** boolean **Properties** Create, Filter, Update

Field	Details
	Description Indicates the visibility of the postal or ZIP code field in the user's contact information. When `true`, postal code is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Experience Cloud sites, via the Guest User license associated with each site. When `false`, this field returns the value `#N/A`. When `true`, this field overrides the value `false` in `UserPreferencesShowPostalCodeToExternalUsers`, making the user's postal code visible to external members. The default value is `false`. This field is available in API version 28.0 and later.
UserPreferencesShowProfilePicToGuestUsers	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the user's profile photo. When `true`, the photo is visible to guest users in an Experience Cloud site. Guest users can access public Site.com and Salesforce sites, and public pages in Experience Cloud sites, via the Guest User license associated with each site. When `false`, this field returns the stock photo. The default value is `false`. This field is available in API version 28.0 and later.
UserPreferencesShowStateToExternalUsers	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the state field in the user's contact information. State is visible only to internal members of the user's organization when: • This field is `false`. When `false`, this field returns the value `#N/A`. State is visible to external members in an Experience Cloud site when: • This field is `true`, or • This field is `false` but `UserPreferencesShowStateToGuestUsers` is `true`, which overrides this field's value. External users are users with Community, Customer Portal, or partner portal licenses.

Field	Details
	When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 26.0 and later.
`UserPreferencesShowStateToGuestUsers`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the state field in the user's contact information. When `true`, state is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Experience Cloud sites, via the Guest User license associated with each site. When `false`, this field returns the value `#N/A`. When `true`, this field overrides the value `false` in UserPreferencesShowStateToExternalUsers, making the user's state visible to external members. The default value is `false`. This field is available in API version 28.0 and later.
`UserPreferencesShowStreetAddressToExternalUsers`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the street address field in the user's contact information. The address is visible only to internal members of the user's organization when this field is `false`. The address is visible to external members in an Experience Cloud site when this field is `true`. External users are users with Community, Customer Portal, or partner portal licenses. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 26.0 and later.
`UserPreferencesShowStreetAddressToGuestUsers`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the street address field in the user's contact information. When `true`, the street address field is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Experience Cloud sites, via the Guest User license associated with each site.

Field	Details
	When `true`, this field overrides the value `false` in `UserPreferencesShowStreetAddressToExternalUsers`, making the user's street address visible to guests. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 34.0 and later.
`UserPreferencesShowTitleToExternalUsers`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the business title field in the user's contact information. Title is visible only to internal members of the user's organization when: • This field is `false`. When `false`, this field returns the value `#N/A`. Title is visible to external members in an Experience Cloud site when: • This field is `true`, or • This field is `false` but `UserPreferencesShowTitleToGuestUsers` is `true`, which overrides this field's value. External users are users with Community, Customer Portal, or partner portal licenses. The default value is `true`. This field is available in API version 26.0 and later.
`UserPreferencesShowTitleToGuestUsers`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the business title field in the user's contact information. When `true`, title is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Experience Cloud sites, via the Guest User license associated with each site. When `false`, this field returns the value `#N/A`. When `true`, this field overrides the value `false` in UserPreferencesShowTitleToExternalUsers, making the user's title visible to external members. The default value is `false`. This field is available in API version 28.0 and later.

Field	Details
UserPreferencesShowWorkPhoneToExternalUsers	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the work phone number field in the user's contact information. The number is visible only to internal members of the user's organization when this field is `false`. The number is visible to external members in an Experience Cloud site when this field is `true`. External users are users with Community, Customer Portal, or partner portal licenses. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 26.0 and later.
UserPreferencesShowWorkPhoneToGuestUsers	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the work phone field in the user's contact information. When `true`, the work phone field is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Experience Cloud sites, via the Guest User license associated with each site. When `true`, this field overrides the value `false` in `UserPreferencesShowWorkPhoneToExternalUsers`, making the user's work phone visible to guests. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 34.0 and later.
UserPreferencesSortFeedByComment	**Type** boolean **Properties** Create, Filter, Update **Description** Specifies the data value used in sorting a user's feed. When `true`, the feed is sorted by most recent comment activity. When `false`, the feed is sorted by post date.
UserPreferencesSuppressEventSFXReminders	**Type** boolean **Properties** Create, Filter, Update

Field	Details
	Description When `true`, event reminders don’t appear. Corresponds to the **Show event reminders in Lightning Experience** checkbox on the Activity Reminders page in the user interface. This field is related to UserPreference and customizing activity reminders.
`UserPreferencesSuppressTaskSFXReminders`	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, task reminders don’t appear. Corresponds to the **Show task reminders in Lightning Experience**. checkbox on the Activity Reminders page in the user interface. This field is related to UserPreference and customizing activity reminders.
`UserPreferencesTaskRemindersCheckboxDefault`	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, a reminder popup is automatically set on the user's tasks. Corresponds to the `By default, set reminder on Tasks to...` checkbox on the Reminders page in the user interface. This field is related to UserPreference and customizing activity reminders.
`UserPreferencesUserDebugModePref`	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, the Lightning Component framework executes in debug mode for the user. Corresponds to the `Debug Mode` checkbox on the Advanced User Details page of personal settings in the user interface.
`UserRoleId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the user’s UserRole. Label is **Role ID**.

Field	Details
UserType	**Type** picklist **Properties** Filter, Group, Nillable, Sort, Restricted picklist **Description** The category of user license. Each `UserType` is associated with one or more UserLicense records. Each UserLicense is associated with one or more profiles. In API version 10.0 and later, valid values include: • Standard: user license. This user type also includes Salesforce Platform and Salesforce Platform One user licenses. Label is **Standard**. • PowerPartner: User whose access is limited because they're a partner and typically access the application through a partner portal or Experience Cloud site. Label is **Partner**. • CSPLitePortal: user whose access is limited because they're an org's customer and access the application through a Customer Portal or Experience Cloud site. Label is **High Volume Portal**. • CustomerSuccess: user whose access is limited because they're an org's customer and access the application through a Customer Portal. Label is **Customer Portal User**. • PowerCustomerSuccess: user whose access is limited because they're an org's customer and access the application through a Customer Portal. Label is **Customer Portal Manager**. Users with this license type can view and edit data they directly own or data owned by or shared with users below them in the Customer Portal role hierarchy. • CsnOnly: user whose access to the application is limited to Chatter. This user type includes Chatter Free and Chatter moderator users. Label is **Chatter Free**. • Guest: user whose access is limited because they're an unauthenticated user without login credentials. Label is **Guest**.
WirelessEmail	**Type** email **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Wireless email address associated with this user. For use with Salesforce Wireless Edition. This field is available only if the Wireless and Email permissions are enabled for your organization.

Field	Details
	Note: As of November 2005, Salesforce Wireless Edition is no longer available for purchase. You can continue to use Wireless Edition through the end of your existing contract term if you are: • A Professional Edition customer and purchased Wireless Edition before November 7, 2005. • An Enterprise Edition customer who signed or renewed their Salesforce contract before November 7, 2005.

Usage

Use this object to query information about users and to provision and modify users in your organization. Unlike other objects, the records in the User table represent actual users—not data owned by users. Any user can query or describe User records.

For example, the following SOQL code finds users with a particular user role.

```
SELECT Id, Username
FROM User
WHERE UserRoleId='00ED0000000xicT'
```

Each portal user is associated with a portal account. A portal account can have a maximum of three portal roles (Executive, Manager, and User). You can select the default number of roles to be created from the user interface. The role hierarchy is maintained when you insert and delete portal roles, and roles are created bottom-up. Deleting the User role causes the Manager role to be renamed to User role. Deleting both the Executive and User roles causes the Manager role to be renamed to User role. Before deleting a role, you must assign users under that role to another role.

Deactivate Users

You can't delete a user in the user interface or the API. You can deactivate a user in the user interface; and you can deactivate or disable a Customer Portal or partner portal user in the user interface or the API. Because users can never be deleted, we recommend that you exercise caution when creating them.

Be aware of the expected behaviors when deactivating users. See Considerations for Deactivating Users. The user interface provides options to auto-remove a user from teams, but the removal isn't supported in API.

If you deactivate a user, any EntitySubscription where the user is associated with the ParentId or SubscriberId field, meaning all subscriptions both to and from the user, are soft deleted. If the user is reactivated, the subscriptions are restored. However, if you deactivate multiple users at once and these users follow each other, their subscriptions are hard deleted. In this case, the user-to-user EntitySubscription is deleted twice (double deleted). Such subscriptions can't be restored upon user reactivation.

Passwords

For security reasons, you can't query User passwords via the API or the user interface. But the API allows you to set and reset User passwords using the `setPassword()` and `resetPassword()` calls. The password lockout status and the ability to reset the User locked-out status isn't available via the API. Check and reset the User password lockout status using the user interface.

Associated Objects

This object has the following associated objects. They're available in the same API version as this object, unless noted.

UserFeed (API version 18.0)
Feed tracking is available for the object.

UserShare
Sharing is available for the object.

SEE ALSO:

getUserInfo()
create()
update()
query()
search()
retrieve()
upsert()
update()
getUpdated()
getDeleted()
describeSObjects()
Frequently-Occurring Fields
UserRole
UserLicense

UserAccountTeamMember

Represents a User on the default account team of another User.

See also OpportunityTeamMember, which represents a User on the opportunity team of an Opportunity

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal and Chatter Free users can't access this object.

Fields

Field	Details
AccountAccessLevel	**Type** picklist **Properties** Create, Filter, Restricted picklist, Update **Description** Required. For Account records that the user has added to his or her default account team, the level of access the account team member has. . The possible values are: • Read • Edit This field must be set to an access level that is higher than the organization’s default access level for accounts.
CaseAccessLevel	**Type** picklist **Properties** Create, Filter, Restricted picklist, Update **Description** Required. Level of access that the account team member has to Case records related to the account. The possible values are: • None • Read • Edit This field must be set to an access level that is higher than the organization's default access level for cases.
ContactAccessLevel	**Type** picklist **Properties** Create, Filter, Restricted picklist, Update **Description** Required. ForContact records related to the account, the level of access that the account team member has. The possible values are: • None • Read • Edit This field must be set to an access level that is higher than the organization's default access level for contacts.

Field	Details
	Note: When `DefaultContactAccess` is set to `Controlled by Parent`, you can't create or update this field.
`OpportunityAccessLevel`	**Type** picklist **Properties** Create, Filter, Restricted picklist, Update **Description** Required. Level of access that the team member has to Opportunity records related to the account. The possible values are: • `None` • `Read` • `Edit` This field must be set to an access level that is higher than the organization's default access level for opportunities.
`OwnerId`	**Type** reference **Properties** Create, Filter **Description** Required. ID of the User who owns the default account team.
`TeamMemberRole`	**Type** picklist **Properties** Create, Filter, Nillable, Update **Description** Role that the team member has on opportunities for which the user has added his or her default account team. The valid values are set by the organization's administrator in the Account Team Roles picklist. Label is **Team Role**.
`UserId`	**Type** reference **Properties** Create, Filter **Description** Required. ID of the User who is a member of the default account team. This field cannot be updated.

Usage

This object is available only in organizations that have enabled the account teams functionality, which can be done using the user interface.

If you attempt to create a record that matches an existing record, the create call updates any modified fields and returns the existing record.

You can set up a User record so the default account team includes the others who typically work with them on accounts.

UserAppInfo

Stores the last Lightning app logged in to. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`AppDefinitionId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the last Lightning app that the user logged in to. This field is available in API version 43.0 and later.
`FormFactor`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The relative size of the app as displayed. Values are: • Small—suitable for a small device like a mobile phone • Medium—suitable for a tablet • Large—suitable for a large display device, like a monitor It's possible to have three versions of the app as the one last logged in to, where each version has a different form factor.
`UserId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** The ID of the user that used this app.

UserAppMenuCustomization

Represents an individual user's settings for items in the app menu or App Launcher. This object is available in API version 35.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`ApplicationId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The 15-character ID for the application associated with the menu item.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the user for these specific settings.
`SortOrder`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The index value that controls where this item appears in the menu. For example, a menu item with a sort order value of 5 will appear between items with sort order values of 3 and 9.

Usage

See the AppMenuItem object for the organization-wide default settings This object contains the fields representing any changes the user made to the menu.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

UserAppMenuCustomizationOwnerSharingRule
Sharing rules are available for the object.

UserAppMenuCustomizationShare
Sharing is available for the object.

UserAppMenuItem

Represents the organization-wide settings for items in the app menu or App Launcher that the requesting user has access to in Setup. This object is available in API version 35.0 and later.

Supported Calls

`describeLayout()`, `describeSObjects()`, `query()`, `search()`

Fields

Field Name	Details
`AppMenuItemId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The 15-character ID for the menu item.
`ApplicationId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The 15-character ID for the application associated with the menu item.
`Description`	**Type** string

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** A description of this menu item.
IconUrl	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** The icon for the menu item’s application.
InfoUrl	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** The URL for more information about the application.
IsUsingAdminAuthorization	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If true, the app is pre-authorized for certain users by the administrator.
IsVisible	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If true, the app is visible to the user.
Label	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The app’s name.

Field Name	Details
LogoUrl	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** The logo for the menu item's application. The default is the initials of the Label value.
MobileStartUrl	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** The location mobile users are directed to after they've authenticated. This is only used with connected apps.
Name	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The API name of the item.
SortOrder	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The index value that controls where this item appears in the menu. For example, a menu item with a sort order value of 5 will appear between items with sort order values of 3 and 9.
StartUrl	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** The location users are directed to after they've authenticated. For a connected app, this is the location specified by the StartUrl. Otherwise it's the application's default start page.

Field Name	Details
Type	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of application represented by this item. The types are: • ConnectedApplication • Network • ServiceProvider • TabSet
UserSortOrder	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The index value that represents where the user set this item in the menu (or App Launcher). For example, an item with a sort order value of 5 will appear between items with sort order values of 3 and 9. This value is separate from SortOrder so you can create logic incorporating both values. For example, if you want the user-sorted items to appear first, followed by the organization order for the rest, use: `SELECT ApplicationId,SortOrder,UserSortOrder FROM AppMenuItem order by userSortOrder NULLS LAST, sortOrder NULLS LAST`

Usage

See the AppMenuItem object for the organization-wide default settings This object contains the fields the requesting user has permission to see.

UserAuthCertificate

Represents a user authentication certificate in your org. A user certificate is a unique PEM-encoded X.509 digital certificate to authenticate individual users to your org. This object is available in API version 45.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

This object is only available in orgs configured with My Domain and with `Let users authenticate with a certificate` enabled in Identity Verification. Only users with the Manage Internal Users permission can access this object.

Fields

Field	Details
`CertificateChain`	**Type** base64 **Properties** Create, Update **Description** The uploaded PEM files can contain a single certificate or up to 10 certificates in a certificate chain. Uploaded PEM files cannot be larger than 1 MB.
`CertificateChainLength`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The auto-generated length of the certificate or certificate chain in the uploaded PEM file.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, Salesforce generates one for each record, which slows performance.
`ExpirationDate`	**Type** dateTime **Properties** Filter, Sort **Description** The expiration date of the uploaded certificate.

Field	Details
Fingerprint	**Type** string **Properties** Filter. Group, idLookup, Sort **Description** The unique fingerprint of the uploaded certificate.
Language	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language in which to display the certificate. Possible values are: • `da` (Danish) • `de` (German) • `en_US` (English) • `es` (Spanish) • `es_MX` (Spanish - Mexico) • `fi` (Finnish) • `fr` (French) • `it` (Italian) • `ja` (Japanese) • `ko` (Korean) • `nl_NL` (Dutch) • `no` (Norwegian) • `pt_BR` (Portuguese - Brazil) • `ru` (Russian) • `sv` (Swedish) • `th` (Thai) • `zh_CN` (Chinese - Simplified) • `zh_TW` (Chinese - Traditional)
MasterLabel	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** A descriptive name for the certificate.

Field	Details
SerialNumber	**Type** string **Properties** Filter, Group, Sort **Description** The serial number of the uploaded certificate.
UserID	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The user associated with the certificate.

UserConfigTransferButton

Represents the association between a Chat configuration and a live chat button. This association allows users associated with a specific configuration to transfer chats to a button queue.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Summer '20 and later, only authenticated internal and external users can access this object.

Fields

Field Name	Details
LiveChatButtonId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the live chat button that agents can transfer chats to.
LiveChatUserConfigId	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** The ID of the Chat configuration; agents associated with this configuration can transfer chats to the chat button indicated by the `LiveChatButtonId`.

UserConfigTransferSkill

Represents the association between a Chat configuration and a skill. This association allows users associated with a specific configuration to transfer chats to agents who have that skill.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`LiveChatUserConfigId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the Chat configuration; agents associated with this configuration can transfer chats to the chat button indicated by the `LiveChatButtonId`.
`SkillId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the skill group that agents can transfer chats to.

UserCustomBadge

Represents a custom badge for a user. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`BadgeType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of badge. Valid values are: • `Customer` • `Partner` • `Employee`
`CustomText`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Custom text for the badge.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the Experience Cloud site or org that the badge is in.

UserCustomBadgeLocalization

Represents the translated version of a custom badge for a user. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`

Special Access Rules

- Translation Workbench must be enabled for your org.
- Users with the “Customize Application” or “Manage Translation” permission can create or update UserCustomBadge translations.

Fields

Field Name	Details
`Language`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The language the UserCustomBadge is translated into. This picklist contains these fully supported languages. • Chinese (Simplified): `zh_CN` • Chinese (Traditional): `zh_TW` • Danish: `da` • Dutch: `nl_NL` • English: `en_US` • Finnish: `fi` • French: `fr` • German: `de` • Italian: `it` • Japanese: `ja` • Korean: `ko` • Norwegian: `no` • Portuguese (Brazil): `pt_BR` • Russian: `ru` • Spanish: `es` • Spanish (Mexico): `es_MX` Spanish (Mexico) defaults to Spanish for customer-defined translations. • Swedish: `sv` • Thai: `th` The Salesforce user interface is fully translated to Thai, but Help is in English.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the UserCustomBadge.
`Value`	**Type** string **Properties** Create, Filter, Sort, Update **Description** The translated text for the UserCustomBadge. Label is **Translation Text**.

UserDevice

Represents information unique to a device. Available in API version 43.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You must have View Devices enabled to see devices.

Fields

Field Name	Details
BrowserType	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The browser used for login.
DeviceNativeUid	**Type** string **Properties** Filter, Group, idLookup, Nillable, Sort **Description** A unique string used to identify a mobile device.
DeviceType	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The device used to log in to Salesforce. The picklist options are: • Desktop • Tablet • iPad • iPhone • Phone • Unknown
IsVerified	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Reserved for future use.
LastLoginHistoryId	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The most recent LoginHistory associated with the device.
Name	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** This field is system-generated and cannot be changed.
PlatformType	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The operating system of the device. The picklist options are: • iOS • Android • OSX • Linux • Phone • Windows • AppleApp • Blackberry • Other
PlatformVersion	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The version of the operating system running on the device.
Status	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The activity status of the device. The picklist options are: • Approved

Field Name	Details
	• Pending Approval • Revoked
`UserId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the user.
`UserLastSeen`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time of the user's last access.
`UserProvidedDeviceIdentifier`	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** An identifier for the user's device, like the International Mobile Equipment Identity (IMEI) number or the device serial number.

UserDeviceApplication

Represents information on applications installed on a device that is accessing Salesforce. Available in API version 43.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You must have View Devices enabled to see devices.

Fields

Field Name	Details

Field Name	Details
ApplicationType	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The type of application used to log in to Salesforce.
Name	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** This field is system-generated and cannot be changed.
Status	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The activity status of the device application. The picklist options are: • Approved • Pending Approval • Revoked
UserDeviceId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The unique identifier used to identify a device when tracking events. `UserDeviceId` is a generated value that's created when the mobile app is initially run after installation.
UserId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the user.

UserDeviceHistory

Represents tracking information on the UserDevice sObject. This object is available in API version 50.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Fields

Field	Details
`DataType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of data that has changed. Possible values are: • `Address` • `AnyType` • `AutoNumber` • `Base64` • `BitVector` • `Boolean` • `Content` • `Currency` • `DataCategoryGroupReference` • `DateOnly` • `DateTime` • `Division` • `Double` • `DynamicEnum` • `Email` • `EncryptedBase64` • `EncryptedText` • `EntityId` • `EnumOrId` • `ExternalId` • `Fax`

Field	Details
	• File • HtmlMultiLineText • HtmlStringPlusClob • InetAddress • Json • Location • MultiEnum • MultiLineText • Namespace • Percent • PersonName • Phone • Raw • RecordType • SfdcEncryptedText • SimpleNamespace • StringPlusClob • Switchable_PersonName • Text • TimeOnly • Url • YearQuarter
Field	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The field that has changed. Possible values are: • BrowserType—Browser • DeviceNativeUid—Device Native ID • DeviceType—Device Type • HashedBrowserFingerPrint—Hashed Browser Fingerprint • IsVerified—Is Device Verified • LastLoginHistory—Login History • Name • PlatformType—Platform or OS Type

Field	Details
	• `PlatformVersion`—Platform or OS Version • `RawBrowserFingerPrint`—Raw Browser Fingerprint Data • `Status`—Device Status • `User` • `UserLastSeen`—Last time user was seen • `UserProvidedDeviceIdentifier`—User provided device identifier • `created`—Created. • `feedEvent`—Feed event • `individualMerged`—Individual Merged • `locked`—Record locked. • `ownerAccepted`—Owner (Accepted) • `ownerAssignment`—Owner (Assignment) • `unlocked`—Record unlocked.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The value after a change has occurred.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The value before a change has occurred.
`UserDeviceId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the UserDevice object.

UserEmailCalendarSync

Represents the user assignments of an Einstein Activity Capture configuration. This object is available in API version 49.0 and later.

Supported Calls

`create()`, `describeSObjects()`, `query()`, `update()`, `upsert()`

Fields

Field	Details
`ConfigurationId`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the Einstein Activity Capture configuration. The configuration is created in Salesforce Setup. After the configuration is created, the autogenerated ID is visible on the Configurations tab. From Setup, in the Quick Find box, enter *`Einstein Activity Capture`*, and then select **Settings**. Click the Configurations tab.
`UserId`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the user. Only Einstein Activity users can be added to a configuration.

Usage

Use UserEmailCalendarSync to add and remove users to an Einstein Activity Capture configuration.

This example adds two users to an Einstein Activity Capture configuration.

```
// Create a list of UserEmailCalendarSync records
List<UserEmailCalendarSync> usersToAdd = new ArrayList<>();

// Populate the UserEmailCalendarSync record with the ID of
// the user, and with the ID of the Activity Capture configuration you are adding them to
UserEmailCalendarSync user1 = new UserEmailCalendarSync(ConfigurationId = '0063xxxxxxxxxxx',
 UserId = '005xxxxxxxxxxxx');

UserEmailCalendarSync user2= new UserEmailCalendarSync(ConfigurationId = '0063xxxxxxxxxxx',
 UserId = '005xxxxxxxxxxxx');
```

```
// add the UserEmailCalendarSync users to your list
usersToAdd.add(user1);
usersToAdd.add(user2);
```

```
// Insert the list of UserEmailCalendarSync into the database
Database.SaveResult[] results = Database.insertImmediate(usersToAdd);
```

This example removes a user from an Einstein Activity Capture configuration.

To remove a user, call `UserEmailCalendarSync()`, passing in `null` for `ConfigurationId`.

```
UserEmailCalendarSync user2Remove= new
UserEmailCalendarSync(ConfigId = "", UserId ='005xxxxxxxxxxx');
Database.SaveResult results =Database.insertImmediate(user2Remove);
```

UserEmailPreferredPerson

Represents a mapping for a user's preferred record for an email address when multiple records match an email field.This object is available in API version 44.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

As of Summer '20 and later, only authenticated internal and external users can access this object.

Fields

Field	Details
`Email`	**Type** email **Properties** Create, Filter,Group, idLookup, Sort, Update **Description** Required. The unique email the mapping applies to. This field is unique for each user.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** Read-only. Auto-generated field.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description Required. The userId that owns the record. Each record is only accessible to the owner.
`PersonRecordId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Required. The recordId of a contact, lead, or user that represents the preferred record for the email address. Use cascade delete for contact and lead, and delete if the personId is a deactivated user record.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

UserEmailPreferredPersonShare
Sharing is available for the object.

UserEmailPreferredPersonShare

Represents a sharing entry on a UserEmailPreferredPerson object. Sharing is not customizable for UserEmailPreferredPerson records.This object is available in API version 44.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter,Group, Restricted picklist, Sort, Update **Description** Required. The level of access allowed. Values can be: • `All` • `Edit` • `Read`

Field	Details
	.
ParentId	**Type** reference **Properties** Create, Filter,Group, Sort, **Description** Id of the parent record, if any.
RowCause	**Type** picklist **Properties** Create, Filter,Group, Nillable, Restricted picklist, Sort, **Description** Required. Reason that the sharing entry exists. Valid values can include: • Manual—The User or Group has access because a user with All access manually shared the record with them. • Owner—The User is the owner of the record or is in a role above the record owner in the role hierarchy.
UserOrGroupId	**Type** reference **Properties** Create, Filter,Group, Sort, **Description** Required. ID of the user or group that has been given access to the UserEmailPreferredPerson record. The UserOrGroupID is polymorphic. The label is User/Group Id.

UserLicense

Represents a user license in your organization. A user license entitles a user to specific functionality and determines the profiles and permission sets available to the user.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
LicenseDefinitionKey	**Type** string **Properties** Filter, Group, Sort **Description** A string that uniquely identifies a particular user license. Label is `License Def. ID`. Values are: **AUL**: corresponds to the Salesforce Platform user license **AUL1**: corresponds to the Salesforce Platform One user license **AUL_LIGHT** corresponds to the Salesforce Platform Light user license **FDC_ONE** corresponds to the Lightning Platform - One App user license **FDC_SUB** corresponds to the Lightning Platform App Subscription user license **Overage_Platform_Portal_User** corresponds to the Overage Authenticated Website user license **PID_STRATEGIC_PRM**: corresponds to the Gold Partner user license **PID_CHATTER** corresponds to the Chatter Only user license **PID_CONTENT** corresponds to the Content Only user license **PID_Customer_Portal_Basic**: corresponds to the Customer Portal Manager Standard user license and the Customer Portal User license **PID_Customer_Portal_Standard**: corresponds to the Customer Portal Manager Custom user license **PID_FDC_FREE** corresponds to the Lightning Platform Free user license **PID_IDEAS** corresponds to the Ideas Only user license **PID_Ideas_Only_Portal** corresponds to the Ideas Only Portal user license **PID_Ideas_Only_Site** corresponds to the Ideas Only Site user license **PID_KNOWLEDGE** corresponds to the Knowledge Only user license **PID_Customer_Community** corresponds to the Customer Community license. **PID_Customer_Community_Login** corresponds to the Customer Community Login license. **PID_Partner_Community** corresponds to the Partner Community license. **PID_Partner_Community_Login** corresponds to the Partner Community Login license. **PID_Limited_Customer_Portal_Basic**: corresponds to the Limited Customer Portal Manager Standard user license **PID_Limited_Customer_Portal_Standard**: corresponds to the Limited Customer Portal Manager Custom user license

Field	Details
	PID_Overage_Customer_Portal_Basic: corresponds to the Overage Customer Portal Manager Standard user license **PID_Overage_High Volume Customer Portal** corresponds to the Overage High Volume Customer Portal user license **Platform_Portal_User**: corresponds to the Authenticated Website user license **POWER_PRM**: corresponds to the Partner user license **POWER_SSP**: corresponds to the Customer Portal Manager user license **SFDC**: corresponds to the Full CRM user license
MasterLabel	**Type** string **Properties** Filter, Group, Sort **Description** The user license label. This field is available in API version 32.0 and later.
MonthlyLoginsEntitlement	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The maximum number of customer or partner portal logins allowed per month. A `null` value in this field means the user license is charged according to the number of users rather than the number of logins. This field is available in API version 20.0 and later.
MonthlyLoginsUsed	**Type** int **Properties** Group, Nillable, Sort **Description** The number of successful logins for all users associated with a customer or partner portal user license. This field has a non-`null` value if `MonthlyLoginsEntitlement` has a non-`null` value. This field is available in API version 20.0 and later.
Name	**Type** string **Properties** Filter, Group, idLookup, Sort

Field	Details
	Description The internal name of the user license. Note: Your organization may also include custom user licenses.
`Status`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The current status of the user license. Valid values for this field are `Active` and `Disabled`. This field is available in API version 32.0 and later.
`TotalLicenses`	**Type** int **Properties** Filter, Group, Sort **Description** The number of user licenses in the organization. This field is available in API version 32.0 and later.
`UsedLicenses`	**Type** int **Properties** Filter, Group, Sort **Description** The number of user licenses that are assigned to active users in the organization. This field is available in API version 32.0 and later.
UsedLicensesLastUpdated	**Type** dateTime **Properties** aggregate, Filter, Sort **Description** The timestamp of the query. If your license count exceeds your org's allotted threshold, the count timestamp reflects the previous day, otherwise the timestamp reflects the current day and time. This field is available in API version 41.0 and later.

Usage

Users with the "View Setup and Configuration" permission can use the UserLicense object to view the set of currently defined user licenses in your organization.

The UserLicense object is currently used by bulk user creation to determine the user license to which each profile and permission set belongs. For example, if you use the API to create portal users and you want to know which profile belongs to each portal user license, you can query this object for each profile and check the `LicenseDefinitionKey` to identify the associated user license.

SEE ALSO:

Profile

UserListView

Represents the customizations a user made to a list view. This object is available in API version 32.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Name	Details
`LastViewedChart`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The last chart a user viewed.
`ListViewId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the list view.
`SobjectType`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The API name of the sObject for the user list view.

Name	Details
UserId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the user.

UserListViewCriterion

Represents the criterion for a user's customized list view. The criterion consists of the filters or sort order a user added to a list view for the Salesforce Mobile app. This object is available in API version 32.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Name	Details
ColumnName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the column in the user list view.
Operation	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The criteria to apply, such as "equals" or "starts with."
SortOrder	**Type** int **Properties** Create, Filter, Group, Sort, Update

Name	Details
	Description The order in which the list view is evaluated compared to other UserListViewCriterion objects for the given UserListView.
`UserListViewId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the user list view.
`Value`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The field values used to filter the list view. For example, a value of `94105` if the Field is `Billing Zip/Postal Code` shows only rows that have a billing ZIP code of 94105.

UserLogin

Represents the settings that affect a user's ability to log into an organization. To access this object, you need the `UserPermissions.ManageUsers` permission. This object is available in API version 29.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`, `update()`

Fields

Field Name	Details
`IsFrozen`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort, Update **Description** If `true`, the user account associated with this object is frozen.
`IsPasswordLocked`	**Type** boolean

Field Name	Details
	Properties Defaulted on create, Filter, Group, Sort, Update **Description** If `true`, the user account associated with this object is locked because of too many login failures. From the API, you can set this field to `false`, but not `true`
`UserId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the associated user account. This field can't be updated.

Usage

To query for all frozen users in your organization:

```
SELECT Id, UserId
FROM UserLogin
WHERE IsFrozen = true
```

UserMembershipSharingRule

Represents the rules for sharing user records from a source group to a target group. A user record contains details about a user. Users who are members of the source group can be shared with members of the target group. The source and target groups can be based on roles, portal roles, public groups, or territories. This object is available in API version 26.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`

Special Access Rules

As of Spring '20 and later, only users with the View Setup and Configuration permission can access this object, and only users with the Manage Sharing permission can edit this object.

Fields

Field	Details
`Description`	**Type** textarea

Field	Details
	Properties Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters. This field is available in API version 29.0 and later.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.
`UserAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update

Field	Details
	Description A value that represents the type of sharing being allowed. The possible values are: • `Read` • `Edit`
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the target group being given access.

Usage

Use this object to manage sharing rules for user records. Source and target groups can include internal users, portal users, Chatter or Chatter External users.

UserPackageLicense

Represents a license for an installed managed package, assigned to a specific user. This object is available in API version 31.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`PackageLicenseId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The 18-character Globally Unique ID (GUID) that identifies the package license
`UserId`	**Type** reference **Properties** Create, Filter, Group, Sort

Field Name	Details
	Description The User ID of the user licensed to use this package

Usage

Use this object, in conjunction with PackageLicense, to provide users access to a managed package installed in your organization.

UserPermissionAccess

Represents the permissions accessibility for a current user. Available in API version 41.0 and later.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field	Details
`LastCacheUpdate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The last modified date and time of either the user info or org info, whichever is later.
`Permissions<PermissionName>`	**Type** boolean **Properties** Filter **Description** The name of the permission, such as `PermissionsActivateContract` or `PermissionsAuthorApex` and whether it's available to the user (`true`) or not (`false`).

Usage

API users without `PermissionsViewSetup` can use this object to check if their own sessions have access to a feature.

SEE ALSO:

Profile

PermissionSet

UserPreference

Represents a functional preference for a specific user in your organization.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Only users with the View All Data or Manage Users permission can access UserPreference records of other users but all users can access their own UserPreference record.

Note: This behavior does not affect other types of user access such as Create or Edit.

Fields

Field	Details
`Preference`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** The name of the user preference. Supported values are: • `57` (Event Reminder Default Lead Time) • `58` (Task Reminder Default Time) • `91` (Prevent Logs on Load) • `92` (Autocomplete Apex After Key Press) • `93` (Visualforce Viewstate Inspector) • `94` (Forecasting Displayed Type) • `96` (Editor Theme) • `97` (Editor Font Size)

Field	Details
	• `98` (Pinned Folders) • `99` (Enable Query Plan) • `100` (Enable New Open Dialog) • `101` (Email Transport Type) • `102` (Pinned Wave Folders) • `108` (Density) `Event Reminder Default Lead Time` and `Task Reminder Default Time` are related to these fields on the User object: • `UserPreferencesEventRemindersCheckboxDefault` • `UserPreferencesTaskRemindersCheckboxDefault` • `UserPreferencesSuppressEventSFXReminders` • `UserPreferencesSuppressTaskSFXReminders` `Enable New Open Dialog` is reserved for future use. When creating SOQL queries, `tolabel` is required to return accurate results. For example, `select Id, tolabel(Preference), Value, UserId from UserPreference`. `108` (Density) is available in API v44.0 and later.
`UserId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the user associated with this role. The corresponding field label is **User ID**. Admin users can create and edit preferences for other users. Standard users can delete their own preferences only. For a standard user, the value of the `UserId` field must be their own UserId.
`Value`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** The value of the user preference. For `Event Reminder Default Lead Time`, the values are increasing intervals of time from 0 minutes to 2 days. For `Task Reminder Default Time`, the values are half-hours from 12:00 AM to 11:30 PM. To view the respective sets of values, access the Reminders in your personal settings in the online application.

Usage

Use this object to query the set of currently configured user preferences in your organization. In your client application, you can query the User object to obtain valid User IDs to access the UserPreference object.

All users can invoke the supported calls with this object. Standard users can invoke these calls, but only on their own preferences.

UserProfile

Represents a Chatter user profile.

Note: This object has been deprecated as of API version 32.0. Use the User object to query information about a user in API version 32.0 and later.

Supported Calls

`describeLayout()`, `query()`, `retrieve()`

Special Access Rules

- Information in hidden fields in a user's profile isn't searchable by external users (with a portal profile) in an Experience Cloud site. For example, if a user in a site has a hidden email address and an external user searches for it, the user record isn't returned in the search results. Hidden field values also aren't returned when external users perform searches on nonhidden fields. So if an external user searches for a user's name (can't be hidden), any hidden field values associated with the user record such as a hidden email address aren't returned in the search results.

  internal users belonging to the same Experience Cloud site can search for and view hidden field values in search results.

- Any fields that have been restricted in visibility will be returned empty, whether or not they are, and will not be removed from the field listing.

Fields

Field	Details
`AboutMe`	**Type** textarea **Properties** Filter, Nillable, Sort **Description** Information about the user, such as areas of interest or skills.
`Address` (beta)	**Type** address **Properties** Filter, Nillable

Field	Details
	Description The compound form of the address. Read-only. See Address Compound Fields for details on compound address fields.
City	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The city associated with the user profile.
CompanyName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The company associated with the user profile.
Country	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The country associated with the user profile.
Email	**Type** email **Properties** Filter, Group, idLookup, Sort **Description** The email address associated with the user profile.
Fax	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** The fax number associated with the user profile.
FirstName	**Type** string

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** The user’s first name.
FullPhotoUrl	**Type** url **Properties** Filter, Nillable, Sort **Description** The URL for the user's profile photo if Chatter is enabled. The URL is updated every time a photo is uploaded and reflects the most recent photo. If a newer photo is uploaded, the URL returned for an older photo isn’t guaranteed to return a photo. Query this field for the URL of the most recent photo.
IsActive	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the user has access to log in (`true`) or not (`false`). You can modify a User's active status from the user interface or via the API.
IsBadged	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the user is visually badged (`true`) or not (`false`). Users of the same Chatter user type (internal, external) are badged. Different user types are not badged.
LastName	**Type** string **Properties** Filter, Group, Sort **Description** The user’s last name.

Field	Details
`Latitude` (beta)	**Type** double **Properties** Filter, Nillable, Sort **Description** Used with `Longitude` to specify the precise geolocation of an address. Acceptable values are numbers between –90 and 90 up to 15 decimal places. For details on geolocation compound fields, see Compound Field Considerations and Limitations.
`Longitude` (beta)	**Type** double **Properties** Filter, Nillable, Sort **Description** Used with `Latitude` to specify the precise geolocation of an address. Acceptable values are numbers between –180 and 180 up to 15 decimal places. For details on geolocation compound fields, see Compound Field Considerations and Limitations.
`ManagerId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the user who manages this user.
`MobilePhone`	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** The user's mobile or cellular phone number.
`Name`	**Type** string **Properties** Filter, Group, Sort **Description** Concatenation of `FirstName` and `LastName`.

Field	Details
Phone	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** The user's phone number.
PostalCode	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The user's postal or ZIP code. Label is **Zip/Postal Code**.
SmallPhotoUrl	**Type** url **Properties** Filter, Nillable, Sort **Description** The URL for a thumbnail of the user's profile photo if Chatter is enabled. The URL is updated every time a photo is uploaded and reflects the most recent photo. If a newer photo is uploaded, the URL returned for an older photo isn't guaranteed to return a photo. Query this field for the URL of the most recent photo.
State	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The state associated with the user profile.
Street	**Type** textarea **Properties** Filter, Group, Nillable, Sort **Description** The street address associated with the user profile.
Title	**Type** string

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** The user's business title, such as "Vice President."
`UserPreferencesActivityRemindersPopup`	**Type** boolean **Properties** Filter **Description** When `true`, a reminder window automatically opens when an activity reminder is due. Corresponds to the `Trigger alert when reminder comes due` checkbox at the Reminders page in the personal settings in the user interface.
`UserPreferencesApexPagesDeveloperMode`	**Type** boolean **Properties** Filter **Description** When `true`, indicates that the user has enabled developer mode for editing Visualforce pages and controllers.
`UserPreferencesDisableAllFeedsEmail`	**Type** boolean **Properties** Filter **Description** When `false`, the user automatically receives email for all updates to Chatter feeds, based on the types of feed emails and digests the user has enabled.
`UserPreferencesDisableBookmarkEmail`	**Type** boolean **Properties** Filter **Description** When `false`, the user automatically receives email every time someone comments on a Chatter feed item after the user has bookmarked it.

Field	Details
UserPreferencesDisableChangeCommentEmail	**Type** boolean **Properties** Filter **Description** When `false`, the user automatically receives email every time someone comments on a change the user has made, such as an update to their profile.
UserPreferencesDisableEndorsementEmail	**Type** boolean **Properties** Filter **Description** When `false`, the member automatically receives email every time someone endorses them for a topic.
UserPreferencesDisableFeedbackEmail	**Type** boolean **Properties** Filter **Description** When `false`, the user automatically receives emails related to WDC feedback. This includes when someone requests or offers feedback, shares feedback with the user, or reminds the user to answer a feedback request.
UserPreferencesDisableFileShareNotificationsForApi	**Type** boolean **Properties** Filter **Description** When `false`, email notifications are sent from the person who shared the file to the users that the file is shared with.
UserPreferencesDisableFollowersEmail	**Type** boolean **Properties** Filter **Description** When `false`, the user automatically receives email every time someone starts following the user in Chatter.

Field	Details
UserPreferencesDisableLaterCommentEmail	**Type** boolean **Properties** Filter **Description** When `false`, the user automatically receives email every time someone comments on a feed item after the user has commented on the feed item.
UserPreferencesDisableLikeEmail	**Type** boolean **Properties** Filter **Description** When `false`, the user automatically receives email every time someone likes their post or comment.
UserPreferencesDisableMentionsPostEmail	**Type** boolean **Properties** Filter **Description** When `false`, the user automatically receives email every time they're mentioned in posts.
UserPreferencesDisableMessageEmail	**Type** boolean **Properties** Filter **Description** When `false`, the user automatically receives email for Chatter messages sent to the user.
UserPreferencesDisableProfilePostEmail	**Type** boolean **Properties** Filter **Description** When `false`, the user automatically receives email every time someone posts to the user's profile.

Field	Details
`UserPreferencesDisableRewardEmail`	**Type** boolean **Properties** Filter **Description** When `false`, the user automatically receives emails related to WDC rewards. This includes when someone someone gives a reward to the user.
`UserPreferencesDisableSharePostEmail`	**Type** boolean **Properties** Filter **Description** When `false`, the user automatically receives email every time their post is shared.
`UserPreferencesDisableWorkEmail`	**Type** boolean **Properties** Filter **Description** When `false`, the user receives emails related to WDC feedback, goals, and coaching. The user must also sign up for individual emails listed on the WDC email settings page. When `true`, the user will not receive any emails related to WDC feedback, goals, or coaching even if they are signed up for individual emails.
`UserPreferencesDisCommentAfterLikeEmail`	**Type** boolean **Properties** Filter **Description** When `false`, the user automatically receives email every time someone comments on a post that the user liked.
`UserPreferencesDisMentionsCommentEmail`	**Type** boolean **Properties** Filter

Field	Details
	Description When `false`, the user automatically receives email every time the user is mentioned in comments.
`UserPreferencesDisProfPostCommentEmail`	**Type** boolean **Properties** Filter **Description** When `false`, the user automatically receives email every time someone comments on posts on the user's profile.
`UserPreferencesEnableAutoSubForFeeds`	**Type** boolean **Properties** Filter **Description** When `true`, the user automatically subscribes to feeds for any objects that the user creates.
`UserPreferencesEventRemindersCheckboxDefault`	**Type** boolean **Properties** Filter **Description** When `true`, a reminder popup is automatically set on the user's events. Corresponds to the `By default, set reminder on Events to...` checkbox on the Reminders page in the user interface. This field is related to UserPreference and customizing activity reminders.
`UserPreferencesHideChatterOnboardingSplash`	**Type** boolean **Properties** Filter **Description** When `true`, the initial Chatter onboarding prompts do not appear.
`UserPreferencesHideCSNDesktopTask`	**Type** boolean **Properties** Filter

Field	Details
	Description When `true`, the Chatter recommendations panel never displays the recommendation to install Chatter Desktop.
`UserPreferencesHideCSNGetChatterMobileTask`	**Type** boolean **Properties** Filter **Description** When `true`, the Chatter recommendations panel never displays the recommendation to install Chatter Mobile.
`UserPreferencesHideS1BrowserUI`	**Type** boolean **Properties** Filter **Description** Controls the interface that the user sees when logging in to Salesforce from a supported mobile browser. If `false`, the user is automatically redirected to the Salesforce mobile web. If `true`, the user sees the full Salesforce site. The default value is `false`. Label is **Salesforce User**. This field is available in API version 29.0 or later.
`UserPreferencesHideSecondChatterOnboardingSplash`	**Type** boolean **Properties** Filter **Description** When `true`, the secondary Chatter onboarding prompts do not appear.
`UserPreferencesReminderSoundOff`	**Type** boolean **Properties** Filter **Description** When `true`, a sound automatically plays when an activity reminder is due. Corresponds to the `Play a reminder sound` checkbox on the Reminders page in the user interface.

Field	Details
UserPreferencesShowCityToExternalUsers	**Type** boolean **Properties** Filter **Description** Indicates the visibility of the city field in the user's contact information. City is visible only to internal members of the user's organization when: • This field is `false`. When `false`, this field returns the value `#N/A`. City is visible to external members in an Experience Cloud site when: • This field is `true`, or • This field is `false` but `UserPreferencesShowCityToGuestUsers` is `true`, which overrides this field's value. External users are users with Community, Customer Portal, or partner portal licenses. The default value is `false`. This field is available in API version 26.0 and later.
UserPreferencesShowCityToGuestUsers	**Type** boolean **Properties** Filter **Description** Indicates the visibility of the city field in the user's contact information. When `true`, city is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Experience Cloud sites, via the Guest User license associated with each site. When `false`, this field returns the value `#N/A`. When `true`, this field overrides the value `false` in `UserPreferencesShowCityToExternalUsers`, making the user's city visible to external members. The default value is `false`. This field is available in API version 28.0 and later.
UserPreferencesShowCountryToExternalUsers	**Type** boolean **Properties** Filter

Field	Details
	Description Indicates the visibility of the country field in the user's contact information. Country is visible only to internal members of the user's organization when: • This field is `false`. When `false`, this field returns the value `#N/A`. Country is visible to external members in an Experience Cloud site when: • This field is `true`, or • This field is `false` but `UserPreferencesShowCountryToGuestUsers` is `true`, which overrides this field's value. External users are users with Community, Customer Portal, or partner portal licenses. The default value is `false`. This field is available in API version 26.0 and later.
`UserPreferencesShowCountryToGuestUsers`	**Type** boolean **Properties** Filter **Description** Indicates the visibility of the country field in the user's contact information. When `true`, country is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Experience Cloud sites, via the Guest User license associated with each site. When `false`, this field returns the value `#N/A`. When `true`, this field overrides the value `false` in `UserPreferencesShowCountryToExternalUsers`, making the user's country visible to external members. The default value is `false`. This field is available in API version 28.0 and later.
`UserPreferencesShowEmailToExternalUsers`	**Type** boolean **Properties** Filter **Description** Indicates the visibility of the email address field in the user's contact information. Email address is visible only to internal members of the user's organization when this field is `false`. Email address is visible to external members in an Experience Cloud site when this field is

Field	Details
	`true`. External users are users with Community, Customer Portal, or partner portal licenses. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 26.0 and later.
UserPreferencesShowFaxToExternalUsers	**Type** boolean **Properties** Filter **Description** Indicates the visibility of the fax number field in the user's contact information. Fax number is visible only to internal members of the user's organization when this field is `false`. Fax number is visible to external members in an Experience Cloud site when this field is `true`. External users are users with Community, Customer Portal, or partner portal licenses. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 26.0 and later.
UserPreferencesShowManagerToExternalUsers	**Type** boolean **Properties** Filter **Description** Indicates the visibility of the manager field in the user's contact information. Manager is visible only to internal members of the user's organization when this field is `false`. Manager is visible to external members in an Experience Cloud site when this field is `true`. External users are users with Community, Customer Portal, or partner portal licenses. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 26.0 and later.
UserPreferencesShowMobilePhoneToExternalUsers	**Type** boolean **Properties** Filter **Description** Indicates the visibility of the mobile device number field in the user's contact information. The number is visible only to internal members of the user's organization when this field is `false`. The number is visible to external members in an Experience Cloud site when this

Field	Details
	field is `true`. External users are users with Community, Customer Portal, or partner portal licenses. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 26.0 and later.
`UserPreferencesShowPostalCodeToExternalUsers`	**Type** boolean **Properties** Filter **Description** Indicates the visibility of the postal or ZIP code field in the user's contact information. Postal code is visible only to internal members of the user's organization when: • This field is `false`. When `false`, this field returns the value `#N/A`. Postal code is visible to external members in an Experience Cloud site when: • This field is `true`, or • This field is `false` but `UserPreferencesShowPostalCodeToGuestUsers` is `true`, which overrides this field's value. External users are users with Community, Customer Portal, or partner portal licenses. The default value is `false`. This field is available in API version 26.0 and later.
`UserPreferencesShowPostalCodeToGuestUsers`	**Type** boolean **Properties** Filter **Description** Indicates the visibility of the postal or ZIP code field in the user's contact information. When `true`, postal code is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Experience Cloud sites, via the Guest User license associated with each site. When `false`, this field returns the value `#N/A`. When `true`, this field overrides the value `false` in `UserPreferencesShowPostalCodeToExternalUsers`, making the user's postal code visible to external members. The default value is `false`. This field is available in API version 28.0 and later.

Field	Details
UserPreferencesShowProfilePicToGuestUsers	**Type** boolean **Properties** Filter **Description** Indicates the visibility of the user's profile photo. When `true`, the photo is visible to guest users in an Experience Cloud site. Guest users can access public Site.com and Salesforce sites, and public pages in Experience Cloud sites, via the Guest User license associated with each site. When `false`, this field returns the stock photo. The default value is `false`. This field is available in API version 28.0 and later.
UserPreferencesShowStateToExternalUsers	**Type** boolean **Properties** Filter **Description** Indicates the visibility of the state field in the user's contact information. State is visible only to internal members of the user's organization when: • This field is `false`. When `false`, this field returns the value `#N/A`. State is visible to external members in an Experience Cloud site when: • This field is `true`, or • This field is `false` but `UserPreferencesShowStateToGuestUsers` is `true`, which overrides this field's value. External users are users with Community, Customer Portal, or partner portal licenses. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 26.0 and later.
UserPreferencesShowStateToGuestUsers	**Type** boolean **Properties** Filter **Description** Indicates the visibility of the state field in the user's contact information. When `true`, state is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in

Field	Details
	Experience Cloud sites, via the Guest User license associated with each site. When `false`, this field returns the value `#N/A`. When `true`, this field overrides the value `false` in UserPreferencesShowStateToExternalUsers, making the user's state visible to external members. The default value is `false`. This field is available in API version 28.0 and later.
`UserPreferencesShowStreetAddressToExternalUsers`	**Type** boolean **Properties** Filter **Description** Indicates the visibility of the street address field in the user's contact information. The address is visible only to internal members of the user's organization when this field is `false`. The address is visible to external members in an Experience Cloud site when this field is `true`. External users are users with Community, Customer Portal, or partner portal licenses. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 26.0 and later.
`UserPreferencesShowTitleToExternalUsers`	**Type** boolean **Properties** Filter **Description** Indicates the visibility of the business title field in the user's contact information. Title is visible only to internal members of the user's organization when: • This field is `false`. When `false`, this field returns the value `#N/A`. Title is visible to external members in an Experience Cloud site when: • This field is `true`, or • This field is `false` but `UserPreferencesShowTitleToGuestUsers` is `true`, which overrides this field's value. External users are users with Community, Customer Portal, or partner portal licenses. The default value is `true`. This field is available in API version 26.0 and later.

Field	Details
UserPreferencesShowTitleToGuestUsers	**Type** boolean **Properties** Filter **Description** Indicates the visibility of the business title field in the user's contact information. When `true`, title is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Experience Cloud sites, via the Guest User license associated with each site. When `false`, this field returns the value `#N/A`. When `true`, this field overrides the value `false` in UserPreferencesShowTitleToExternalUsers, making the user's title visible to external members. The default value is `false`. This field is available in API version 28.0 and later.
UserPreferencesShowWorkPhoneToExternalUsers	**Type** boolean **Properties** Filter **Description** Indicates the visibility of the work phone number field in the user's contact information. The number is visible only to internal members of the user's organization when this field is `false`. The number is visible to external members in an Experience Cloud site when this field is `true`. External users are users with Community, Customer Portal, or partner portal licenses. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 26.0 and later.
UserPreferencesTaskRemindersCheckboxDefault	**Type** boolean **Properties** Filter **Description** When `true`, a reminder popup is automatically set on the user's tasks. Corresponds to the `By default, set reminder on Tasks to...` checkbox on the Reminders page in the user interface. This field is related to UserPreference and customizing activity reminders.

Usage

Use this object to query Chatter—related information about the user. While the User object contains all the information about a user and is historically tied to user management, UserProfile is a read-only entity that contains the information that is relevant in a Chatter context.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

UserProfileFeed (API verison 18.0–26.0)
Feed tracking is available for the object.

UserProvAccount

Represents information that links a Salesforce user account with an account in a third-party (target) system, such as Google, for users of connected apps with Salesforce user provisioning enabled. This object is available in API version 33.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`ConnectedAppId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The 15 character application ID.
`DeletedDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date and time when the associated user account in the target system was deleted. This value is automatically updated during the provisioning and reconciling processes.
`ExternalEmail`	**Type** string

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The email address as stored in the target system for the associated user account.
`ExternalFirstName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The first name as stored in the target system for the associated user account.
`ExternalLastName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The last name as stored in the target system for the associated user account.
`ExternalUserId`	**Type** string **Properties** Create, Filter, Group, idLookup, Nillable, Sort, Update **Description** The unique identifier for the user as stored in the target system.
`ExternalUsername`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The username as stored in the target system for the associated user account.
`IsKnownLink`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Setting the `IsKnownLink` value to `true` implies the administrator or another user is managing the relationship between the Salesforce user account and the third-party user account, manually. This field helps Salesforce coordinate updates between the UserProvAccountStaging object and the UserProvAccount object while committing staged

Field	Details
	accounts. Typically, for a matching user account (the same `ExternalUserId` for both objects), Salesforce copies the values from the UserProvAccountStaging object to the UserProvAccount object. However, if Salesforce encounters a UserProvAccountStaging object with a matching `ExternalUserId` but different `LinkState` and `SalesforceUserId` values during this process, Salesforce checks the UserProvAccount `IsKnownLink` value. If the `IsKnownLink`value is `true`, Salesforce doesn't copy the `LinkState` and `SalesforceUserId` values from the UserProvAccountStaging object to the UserProvAccount object (all other values are copied). The default is `false`, meaning Salesforce manages the account relationship.
`LinkState`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The state of the current connection between the user account in the Salesforce organization and the associated user account in the target system. The valid values are: • `linked`— changes to the account in the Salesforce organization are queued to be updated for the associated user account in the target system. • `duplicate`— an associated account in the target system exists. • `orphaned`—no associated account exists in the target system. • `ignored`— changes to the account in the Salesforce organization have no effect on the associated user account in the target system.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The unique name for this object.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Namepointing, Sort, Update **Description** The user ID of the owner of this object—typically a Salesforce administrator.
`SalesforceUserId`	**Type** reference

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The user ID for the user account in the Salesforce organization that is associated with the user account in the target system.
`Status`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The status of the account in the target system. The valid values are: • `Active` • `Deactivated` • `Deleted`

UserProvAccountStaging

Temporarily stores user account information while a user completes the User Provisioning Wizard. This information that is stored in the UserProvAccount object when you click the button to collect and analyze accounts on the target system.

User provisioning links a Salesforce user account with an account in a third-party (target) system. To configure user provisioning, you use a User Provisioning Wizard that guides you through the setup process. As you enter values about account details in the wizard, these values are stored in this object until you click the button to collect and analyze accounts on the target system. The general user provisioning configuration details are stored in the UserProvisioningConfig object.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`ConnectedAppId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The 15 character connected app ID.

Field Name	Details
ExternalEmail	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The email address as stored in the target system for the associated user account.
ExternalFirstName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The first name as stored in the target system for the associated user account.
ExternalLastName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The last name as stored in the target system for the associated user account.
ExternalUserId	**Type** string **Properties** Create, Filter, Group, idLookup, Nillable, Sort, Update **Description** The unique identifier for the user as stored in the target system.
ExternalUsername	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The username as stored in the target system for the associated user account.
LinkState	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update

Field Name	Details
	Description The state of the current connection between the user account in the Salesforce organization and the associated user account in the target system. The valid values are: • `linked`— a user account matches one in the target system. • `duplicate`— an associated account in the target system exists. • `orphaned`—no associated account exists in the target system. • `ignored`— changes to the account in the Salesforce organization have no effect on the associated user account in the target system.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The unique name for this object.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The user ID of the owner of this object—typically a Salesforce administrator.
`SalesforceUserId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The user ID for the user account in the Salesforce organization that is associated with the user account in the target system.
`Status`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The status of the account in the target system. The valid values are: • `Active` • `Deactivated`

Field Name	Details
	• `Deleted`

Usage

When committing fields from a UserProvAccountStaging to a UserProvAccount object, Salesforce looks up the UserProvAccount record where `UserProvAccountStaging.ExternalUserId = UserProvAccount.ExternalUserId`.

- If an `ExternalUserId` doesn't match an existing account, Salesforce creates a UserProvAccount record based on the UserProvAccountStaging record.
- If an `ExternalUserId` matches, then Salesforce checks the `UserProvAccount.isKnownLink` value, and does the following.
  - If `UserProvAccount.IsKnownLink = true`, Salesforce copies the UserProvAccountStaging values to the UserProvAccount object, except for the `ExternalUserId` and `LinkState` values.
  - If `UserProvAccount.IsKnownLink = false`, Salesforce copies all of the UserProvAccountStaging values to the UserProvAccount object.

UserProvMockTarget

Represents an entity for testing user data before committing the data to a third-party system for user provisioning.

During the user provisioning process, user account information is sent to a third-party system to create, update or delete a user account on that system. While configuring user provisioning for your organization using a flow or Apex action, you can use this object to confirm the associated flow or Apex code is sending the desired data. After confirming the correct fields and values, you can update the flow or Apex action to send the data to the target system.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`ExternalEmail`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The email address as stored in the target system for the associated user account.
`ExternalFirstName`	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The first name as stored in the target system for the associated user account.
ExternalLastName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The last name as stored in the target system for the associated user account.
ExternalUserId	**Type** string **Properties** Create, Filter, Group, idLookup, Nillable, Sort, Update **Description** The unique identifier for the user as stored in the target system.
ExternalUsername	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The username as stored in the target system for the associated user account.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The unique name for this object.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The user ID of the owner of this object—typically a Salesforce administrator.

UserProvisioningConfig

Represents information for a flow to use during a user provisioning request process, such as the attributes for an update. This object is available in API version 34.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`ApprovalRequired`	**Type** textarea **Properties** Create, Nillable, Update **Description** Denotes whether approvals are required for provisioning users for the associated connected app. If the value is null, no approval is required.
`ConnectedAppId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The 18-digit application ID for the connected app.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package, and the changes are reflected in a subscriber's organization.
`Enabled`	**Type** boolean

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether user provisioning is enabled for the associated connected app (`true`) or not (`false`).
`EnabledOperations`	**Type** textarea **Properties** Create, Nillable, Update **Description** Lists the operations, as comma-separated values, that create a UserProvisioningRequest object for the associated connected app. Allowed values are: • `Create` • `Update` • `EnableAndDisable` (activation and deactivation) • `SuspendAndRestore` (freeze and unfreeze)
`Language`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The two- to five-character code that represents the language and locale ISO. This code controls the language for labels displayed in an application.
`LastReconDateTime`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date and time when user accounts were last reconciled between Salesforce and the target system.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update

Field Name	Details
	Description The master label for this object. This value is the internal label that doesn't get translated.
`NamedCredentialId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Salesforce ID of the named credential that's used for a request. The named credential identifies the third-party system and the third-party authentication settings.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
`Notes`	**Type** textarea **Properties** Create, Nillable, Update **Description** A utility field for administrators to add any additional information about the configuration. This field is for internal reference only, and is not used by any process.

Field Name	Details
OnUpdateAttributes	**Type** textarea **Properties** Create, Nillable, Update **Description** Lists the user attributes, as comma-separated values, that generate a UserProvisioningRequest object during an update.
ReconFilter	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** When collecting and analyzing users on a third-party system, the plug-in uses this filter to limit the scope of the collection.
UserAccountMapping	**Type** textarea **Properties** Create, Nillable, Update **Description** Stores the attributes used to link the Salesforce user to the account on the third-party system, in JSON format. For example: `{"linkingSalesforceUserAttribute":"Username", "linkingTargetUserAttribute":"Email"}`

UserProvisioningLog

Represents messages generated during the process of provisioning users for third-party applications. This object is available in API version 33.0 and later.

Some messages for this object are generated automatically by Salesforce, and others are created by the developers of the user provisioning plugin. Developers can use this object to log messages from the flow associated with the user provisioning process or the Apex plugin that calls the target system. Administrators can use this object as a log of all user provisioning activity and as a troubleshooting tool if desired behavior is missing. This object is available as a custom report type.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
Details	**Type** textarea **Properties** Create, Nillable, Update **Description** The value of this field depends on the log entry. For example, if the target system returns an error, the error message may be recorded in this field.
ExternalUserId	**Type** string **Properties** Create, Filter, Group, idLookup, Nillable, Sort, Update **Description** The unique identifier for the user in the target system.
ExternalUsername	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The username set in the target system for the associated user account.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The unique name for this object.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Salesforce ID of the Group or User who owns this object.
Status	**Type** string

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The status of the user provisioning request. Based on the context of the log, it can contain different values, such as an HttpStatusCode.
`UserId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Salesforce ID of the user making the request.
`UserProvisioningRequestId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A unique identifier for the user provisioning request.

UserProvisioningRequest

Represents an individual provisioning request to create, update, or delete a single user account in a third-party service system (or another Salesforce organization). This object is available in API version 33.0 and later.

A UserProvisioningRequest (UPR) record is created for each provisioning action for each user, and for each connected app available to the user. For example, if a user has two connected apps, and a provisioning request is sent to two different services to create an account for the user, Salesforce creates two UPR objects. Provisioning actions include creating, updating, or deleting a user account.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`AppName`	**Type** string **Properties** Create, Filter, Group, idLookup, Nillable, Sort, Update

Field	Details
	Description The unique name of the connected app associated with the service provider.
`ApprovalStatus`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The status of the approval for the current request. If the user provisioning setup for the connected app does not have an approval process enabled, the status is `Not Required`. If an approval process is enabled, supported values are: • `Required`— An approval process is enabled in the user provisioning setup for the associated connected app, but there is no response to the request yet. • `Not Required`— An approval process is not enabled in the user provisioning setup for the associated connected app. • `Approved` • `Denied`
`ConnectedAppId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The 18-digit application ID for the connected app.
`ExternalUserId`	**Type** string **Properties** Create, Filter, Group, idLookup, Nillable, Sort, Update **Description** The unique identifier for the user in the target system.
`ManagerId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Salesforce ID of the user who manages the user specified in the `SalesforceUserId` field. If an approval process is configured for the user provisioning request. this value allows the manager to approve the request. Available in API version 34.0 and later.

Field	Details
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The unique name for this object.
Operation	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The Apex method called by the trigger associated with the provisioning request (typically a change to the User object). Supported values are: • Create • Read • Update • Deactivate • Activate • Freeze • Unfreeze • Reconcile • Linking For example, when the User object field isActive is set to false, the UPR object Operation field value is set to Deactivate.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Salesforce ID of the Group or User who owns this object.
ParentID	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** When a retry event is created, the failed UPR is cloned and resubmitted. This field contains a lookup to the failed UPR that was cloned to create the current record.

Field	Details
Retry Count	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** Number of retry attempts performed on a UPR. Retry Count enables custom business logic such as “Retry 5 times then stop and notify your admin.”
SalesforceUserId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Salesforce ID of the user making the request.
ScheduleDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** When to send this request to the service provider. Note: Scheduling is not implemented yet. Currently, provisioning changes are queued immediately to be sent to the service provider.
State	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Status of this request. Supported values are: • New • Requested • Completed • Failed • Collecting • Collected • Analyzing • Analyzed • Committing • Retried

Field	Details
	• `Manually Completed` The `State` goes from `New` to `Requested` to `Completed` or `Failed`, unless a reconciliation process is occurring. For details about the reconciliation process `State` value changes, see Usage. The `State` goes from `Failed` to `Retried` or `Manually Completed` when troubleshooting UPR failures. For details about handling failures, see State Values for Managing Provisioning Failures.
`UserProvAccountId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID value of the associated UserProvAccount object.
`UserProvConfigId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID value of the associated UserProvisioningConfig object. Available in API version 34.0 and later.

Usage

The `State` value changes during a reconciliation process (`Operation = Reconcile`) to gather and compare users on the third-party system to Salesforce users. Typically, when a UPR entry is first created, it has a `State` value of `New`. When a collection process is triggered, the `State` transitions to `Collecting` until that process is finished and the `State` is `Collected`. When an analyze process is triggered, the `State` transitions to `Analyzing` until that process is finished and the `State` is `Analyzed`. If a process commits the request, the `State` then transitions to `Committing`, and the properties move from the UserProvAccountStaging object to the UserProvAccount object. When those properties are saved in the UserProvAccount object, the `State` transitions to `Completed`.

However, the `State` does not necessarily start at `New`. For example, UserProvAccountStaging entries can be inserted programmatically. If a process is initiated that triggers linking these rows to accounts on the third-party service, a UPR entry could start with the `Analyzing State`.

Also, the `State` cannot go backwards from an active task. For example, a successful `Analyzing State` must progress to `Analyzed`; unless the active process fails, and then the `State` must change to `Failed`. Certain `State` transitions cannot be made programmatically and must be triggered by Salesforce.

The following table shows the `State` transitions that can occur for each `State` value. Each row corresponds to a current `State` value and each column corresponds to a new `State` after a potential transition.

-  — the transition to this value is not allowed.

- ✓ — the transition to this value is allowed.
- ☁ — only Salesforce can transition the `State` to this value.

	`New`	`Requested`	`Collecting`	`Collected`	`Analyzing`	`Analyzed`	`Committing`	`Completed`	`Failed`	`Retried`	`Manually Completed`
`New`	✓	☁	✓	✓	✓	✓	✓	✓	✓	✗	✗
`Requested`	✗	✓	☁	☁	☁	☁	☁	☁	☁	✗	✗
`Collecting`	✗	✗	✓	☁	☁	☁	☁	☁	☁	✗	✗
`Collected`	✗	✗	✗	✓	✓	✓	✓	✓	✓	✗	✗
`Analyzing`	✗	✗	✗	☁	✓	☁	☁	☁	☁	✗	✗
`Analyzed`	✗	✗	✗	✗	✗	✓	✓	✓	✓	✗	✗
`Committing`	✗	✗	✗	✗	✗	☁	✓	☁	☁	✗	✗
`Completed`	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗
`Failed`	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓
`Retried`	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
`Manually Completed`	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗

State Values for Managing Provisioning Failures

The `state` value changes to `Failed` for several reasons, such as network outages, session timeouts, permissions issues, and record locks. The `Failed` state can transition to either `Retried` or `Manually Completed` to indicate what action was taken to address the failure. Actions can include correcting the root cause of the failure and requesting that the provisioning engine retry the UPR. Or, it can be completing the action against the target manually. Each UPR is an independent transaction and it's possible the retry causes a failure with a different root cause. So it's hard to distinguish failed events that you addressed from the ones that require more action.

If you tried to correct the cause of the failure and requested the provisioning engine to retry the UPR, you can mark the failed UPR `Retried`. Or, if the action against the target was completed manually, you can mark it `Manually Completed`.

When a retry event is created, the failed UPR is cloned, and resubmitted. The `ParentID` field contains a lookup to the failed UPR to use to clone the new UPR. The `Retry Count` field contains the number of retry attempts that were performed on a UPR. With the `Retry Count` field, you can add custom business logic like "Retry 5 times then stop and notify your admin."

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

UserProvisioningRequestOwnerSharingRule (API version 34.0)
Sharing rules are available for the object.

UserProvisioningRequestShare (API version 34.0)
Sharing is available for the object.

UserRecordAccess

Represents a user's access to a set of records. This object is read only and is available in API version 24.0 and later.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field	Details
`HasAllAccess`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a user can share the record.
`HasDeleteAccess`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a user has delete access to the record (`true`) or not (`false`).
`HasEditAccess`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a user has edit access to the record (`true`) or not (`false`).
`HasTransferAccess`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a user has transfer access to the record (`true`) or not (`false`).
`HasReadAccess`	**Type** boolean

Field	Details
	Properties Defaulted on create, Filter, Group, Sort **Description** Indicates whether a user has read access to the record (`true`) or not (`false`).
`MaxAccessLevel`	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Indicates a user's maximum level of access to a record. Valid values are: • `None` • `Read` • `Edit` • `Delete` • `Transfer` • `All`
`RecordId`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** ID of the record.
`UserId`	**Type** reference **Properties** Filter, Group **Description** ID of the user.

Usage

Use this object to query a user's access to records. You can only query records of objects listed on the Sharing Settings Setup page. You can't create, delete, or update any records using this object.

Up to 200 record IDs can be queried. You can include an `ORDER BY` clause for any field that is being selected in the query.

The following sample query returns the records, whether the queried user has read and transfer access to each record, and the user's maximum access level to each record.

```
SELECT RecordId, HasReadAccess, HasTransferAccess, MaxAccessLevel
     FROM UserRecordAccess
     WHERE UserId = [single ID]
     AND RecordId = [single ID]      //or Record IN [list of IDs]
```

The following query returns the records to which a queried user has read access.

```
SELECT RecordId
     FROM UserRecordAccess
     WHERE UserId = [single ID]
     AND RecordId = [single ID]      //or Record IN [list of IDs]
     AND HasReadAccess = true
```

Using API version 30.0 and later, UserRecordAccess is a foreign key on the records. You can't filter by or provide the `UserId` or `RecordId` fields when using this object as a lookup or foreign key. The previous sample queries can be run as:

```
SELECT Id, Name, UserRecordAccess.HasReadAccess, UserRecordAccess.HasTransferAccess,
UserRecordAccess.MaxAccessLevel
      FROM Account
```

```
SELECT Id, Name, UserRecordAccess.HasReadAccess
      FROM Account
```

SOQL restrictions:

- When the running user is querying a user's access to a set of records, records that the running user does not have read access to are filtered out of the results.
- When filtering by `UserId` and `RecordId` only, you must use `SELECT RecordId` and optionally one or more of the access level fields:`HasReadAccess`, `HasEditAccess`, `HasDeleteAccess`, `HasTransferAccess`, and `HasAllAccess`. You may include `MaxAccessLevel`.
- When filtering by `UserId`, `RecordId`, and an access level field, you must use `SELECT RecordId` only.

UserRole

Represents a user role in your organization.

Note: This object was called "Role" in previous versions of the API documentation.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

As of Summer '20 and later, only users with the View Roles and Role Hierarchy permission can access this object, and only users with the Manage Roles permission can edit this object.

Fields

Field	Details
CaseAccessForAccountOwner	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The case access level for the account owner.
ContactAccessForAccountOwner	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The contact access level for the account owner. Note: When DefaultContactAccess is set to Controlled by Parent, you can't create or update this field.
DeveloperName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Role Name** in the user interface. This field is available in API version 24.0 and later. Note: When creating large sets of data, always specify a unique DeveloperName for each record. If no DeveloperName is specified, performance may slow while Salesforce generates one for each record.
ForecastUserId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description The ID of the forecast manager associated with this role. Label is **User ID**.
`IsPartner`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the user role is a partner who has access to the partner portal (`true`) or not (`false`). This field is not available for release 9.0 and later. Instead, use `PortalType` with the value `Partner`.
`MayForecastManagerShare`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the forecast manager can manually share their own forecast.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. Name of the role. Corresponds to **Label** on the user interface.
`OpportunityAccessForAccountOwner`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. The opportunity access level for the account owner. Note that you can’t set a user role with an opportunity access less than that specified in organization-wide defaults.
`ParentRoleId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the parent role.

Field	Details
PortalAccountId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the role's associated portal account. This field is read-only.
PortalAccountOwnerId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the role's associated portal account's owner. This field is read-only.
PortalRole	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The portal role: Executive, Manager, User, or PersonAccount.
PortalType	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** This value indicates the type of portal for the role: • None: Salesforce application role. • CustomerPortal: Customer portal role. • Partner: partner portal role. The field `IsPartner` used in release 8.0 will map to this value. This field replaces `IsPartner` beginning with release 9.0.
RollupDescription	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of the forecast rollup. Label is **Description**.

Usage

Use this object to query the set of currently configured user roles in your organization. Use it in your client application to obtain valid UserRole IDs to use when querying or modifying a User record.

Users with the View Roles and Role Hierarchy permission can query or describe this object. If your client application logs in with the "Manage Users" permission, it can query, create, update, or delete UserRole records.

Note: You can't update any field for a portal role.

For example, the following code finds all roles that are not assigned to any users.

```
SELECT Id, Name, DeveloperName
FROM UserRole
WHERE Id NOT IN (SELECT UserRoleId
                 FROM User
                 WHERE UserRoleId !='000000000000000')
```

SEE ALSO:

Object Basics

UserServicePresence

Represents a presence user's real-time presence status. This object is available in API version 32.0 and later.

Supported Calls

`delete()`, `query()`, `getDeleted()`, `getUpdated()`, `retrieve()`, `undelete()`

Special Access Rules

To access this object, Omni-Channel must be enabled.

Fields

Field	Details
ConfiguredCapacity	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The user's total configured capacity.
IsAway	**Type** boolean

Field	Details
	Properties Defaulted on create, Filter, Group, Sort **Description** Indicates whether the user's status is `Away`.
`Name`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** An automatically generated ID number that identifies the record.
`OwnerId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the owner of the `UserServicePresence` entity. For external routing, allows the entity to be used in the Streaming API to listen to events whenever a `UserServicePresence` record is created, modified, or deleted.
`ServicePresenceStatusId`	**Type** reference **Properties** Create, Filter, Nillable, Sort, Update **Description** The ID of the presence status that's associated with the presence user that's specified by the `UserId`.
`UserId`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the Omni-Channel user.

Usage

Apex triggers aren't supported with `UserServicePresence`.

Sharing rules aren't supported with `UserServicePresence` even if the `OwnerId` field is enabled.

In API version 41.0 or later, `UserServicePresence` records can be deleted programmatically. The "Customize Application" permission is required.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

UserServicePresenceOwnerSharingRule
Sharing rules are available for the object.

UserServicePresenceShare
Sharing is available for the object.

UserShare

Represents a sharing entry on a user record. This object is available in API version 26.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Summer '20 and later, only standard users or users with the Customize Application permission can access this object.

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field	Details
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Read-only. Indicates whether the User has access to log in (`true`) or not (`false`). You can modify a User's active status from the user interface or via the API.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can only write to this field when its value is either omitted or set to `Manual` (default).

Field	Details
	You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Possible values include: • `Manual`—The User or Group has access to the user record because a User with "All" access manually shared the User with them. • `Rule`—The User or Group has access to the user record via a User sharing rule. • `GuestRule`—The User or Group has access via a User guest user sharing rule. • `LpuImplicit`—The User has access to records owned by high-volume Experience Cloud site users via a share group.
`UserAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the User or Group has to the specified user. The specified user is denoted by the `UserId`. The possible values are: • `Read` • `Edit` This field must be set to an access level that is at least equal to the organization's default `UserAccessLevel`. `UserAccessLevel` can be updated only if `RowCause` is set to `Manual Sharing`.
`UserId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the User being shared.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the User or Group that has been given access to the User. This field can't be updated.

Usage

This object allows you to determine which users and groups can view or edit User records owned by other users.

UserTeamMember

Represents a single User on the default opportunity team of another User.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- This object is available only in organizations that have enabled the team selling functionality.
- Customer Portal users can't access this object.

Fields

Field	Details
`OpportunityAccessLevel`	**Type** picklist **Properties** Create, Filter, Restricted picklist, Update **Description** Required. Level of access that the team member has to opportunities for which the user has added his or her default opportunity team. The possible values are: • `Read` • `Edit` This field must be set to an access level that is higher than the organization's default access level for opportunities.
`OwnerId`	**Type** reference **Properties** Create, Filter **Description** Required. ID of the User who owns the default opportunity team. This field can't be updated.
`TeamMemberRole`	**Type** picklist

Field	Details
	Properties Create, Filter, Nillable, Update **Description** Role that the team member has on opportunities for which the User has added his or her default opportunity team. The valid values are set by the organization's administrator in the Opportunity Team Roles picklist. Label is **Team Role**.
`UserId`	**Type** reference **Properties** Create, Filter **Description** Required. ID of the User who is a member of the default opportunity team. This field can't be updated.

Usage

If you attempt to create a record that matches an existing record, the create request updates any modified fields and returns the existing record.

Users can set up their default opportunity team to include other users that typically work with them on opportunities.

SEE ALSO:

OpportunityTeamMember

UserTerritory

Represents a User who has been assigned to a Territory.

Note: The original territory management feature is scheduled for retirement for all customers as of Summer '21. After the feature is retired, users can't access the original territory management feature and its underlying data. We encourage you to migrate to Enterprise Territory Management. We also strongly recommend that you keep a comprehensive backup of your territory data while you're still using the original territory management feature. For more information, see The Original Territory Management Module Will Be Retired in the Summer '21 Release. The information in this topic applies to the original territory management feature only, and not to Enterprise Territory Management.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

- Only available if territory management has been enabled for your organization.

- As of Spring '20 and later, only users with the View Setup and Configuration permission can access this object, and only users with the Manage Territories permission can edit this object.

Fields

Field	Details
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the user is active in the given territory (`true`), or inactive in the given territory (`false`): • Users who are active in a territory are explicitly assigned to the territory and can have open opportunities, closed opportunities, or no opportunities associated with that territory. • Users who are inactive in a territory are not explicitly assigned to the territory, but own an open or closed opportunity that is associated with the territory. For example, a user may have been transferred out of a territory, but still own opportunities in his or her old territory. Until a user is deleted from a territory (not simply removed from the territory), the record is not returned in a `getDeleted()` call.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`TerritoryId`	**Type** reference **Properties** Create, Filter **Description** ID of the Territory to which the user has been assigned. This field is required when creating a record in API version 20.0 and later.
`UserId`	**Type** reference **Properties** Create, Filter

Field	Details
	Description ID of the user. This field is required when creating a record.

Usage

If a user is inactive in a territory, and the opportunities they own that are associated with the territory are all closed, the user is not returned in the Territories related list on the User page in Setup. Regardless of whether the user is inactive or the opportunities are closed, the user is returned in the Quotas related list.

SEE ALSO:

- Territory
- AccountTerritoryAssignmentRule
- AccountTerritoryAssignmentRuleItem

UserTerritory2Association

Represents an association (by assignment) between a territory and a user record. Available only if Enterprise Territory Management has been enabled for your organization.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

As of Summer '20 and later, only standard and partner users can access this object. If a territory model is in `Active` state, any standard or partner user can view that model, including its territories and assignment rules. For territories in an active model, any standard or partner user can view assigned records and assigned users subject to your org's sharing settings. Users cannot view territory models in other states (such as `Planning` or `Archived`).

Fields

Field Name	Details
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the user is active (`true`) or inactive (`false`) in the given territory.

Field Name	Details
RoleInTerritory2	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The role of the user in a territory. Possible values are: Owner, Administrator, Sales Rep. Label is `Role in Territory`.
Territory2Id	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the territory that the user is assigned to.
UserId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the user who is assigned to the territory.

UserWorkList

Represents a list of work items in the My Feed tab for High Velocity Sales users.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
IsActive	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description Whether the work list is active or not.
`ListType`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The type of list, such as a call or email.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the work list.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The owner of the list.

UserWorkListItem

Represents an individual work item in the My Feed tab for High Velocity Sales users.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`PriorityOrder`	**Type** int

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** The order of the item in the list.
RelatedRecordId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the related record.
UserWorkListId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the related work list.

VerificationHistory

Represents the past six months of your org users' attempts to verify their identity. This object is available in API version 36.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Special Access Rules

Only users with Manage Users permission can access this object.

Fields

Field Name	Details
Activity	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort

Field Name	Details
	Description The action the user attempted that requires identity verification. The label is User Activity. Available values are: • AccessReports—The user attempted to access reports or dashboards. • Apex—The user attempted to access a Salesforce resource with a verification Apex method. • ChangeEmail—The user attempted to change an email address. • ConnectSms—The user attempted to connect a phone number. • ConnectToopher—The user attempted to connect Salesforce Authenticator. • ConnectTotp—The user attempted to connect a one-time password generator. • ConnectU2F—The user attempted to register a U2F security key. • ConnectedApp—The user attempted to access a connected app. • EnableLL—The user attempted to enroll in Lightning Login. • ExportPrintReports—The user attempted to export or print reports or dashboards. • ExtraVerification—Reserved for future use. • ListView—The user attempted to access a list view. • Login—The user attempted to log in. • Registration—Reserved for future use. • TempCode—The user attempted to generate a temporary verification code.
EventGroup	**Type** int **Properties** Filter, Group, Sort **Description** ID of the verification attempt. Verification can involve several attempts and use different verification methods. For example, in a user's session, a user enters an invalid verification code (first attempt). The user then enters the correct code and successfully verifies identity (second attempt). Both attempts are part of a single verification and, therefore, have the same ID. The label is Verification Attempt.
LoginGeoId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The 18-character ID for the record of the geographic location of the user for a successful or unsuccessful identity verification attempt. Due to the nature of

Field Name	Details
	geolocation technology, the accuracy of geolocation fields (for example, country, city, postal code) can vary.
`LoginHistoryId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID for the record of the user's successful or unsuccessful login attempt.
`Policy`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The identity verification security policy or setting. The label is Triggered By. Available values are: • CustomApex—Identity verification made by a verification Apex method. • DeviceActivation—Identity verification required for users logging in from an unrecognized device or new IP address. This verification is part of Salesforce's risk-based authentication. • EnableLightningLogin—Identity verification required for users enrolling in Lightning Login. This verification is triggered when the user attempts to enroll. Users are eligible to enroll if they have the Lightning Login User user permission and the org has enabled Allow Lightning Login in Session Settings. • ExtraVerification—Reserved for future use. • HighAssurance—High assurance session required for resource access. This verification is triggered when the user tries to access a resource, such as a connected app, report, or dashboard, that requires a high-assurance session level. • LightningLogin—Identity verification required for internal users logging in via Lightning Login. This verification is triggered when the enrolled user attempts to log in. Users are eligible to log in if they have the Lightning Login User user permission and have successfully enrolled in Lightning Login. Also, from Session Settings in Setup, Allow Lightning Login must be enabled. • PageAccess—Identity verification required for users attempting to perform an action, such as changing an email address or adding a verification method for multi-factor authentication (MFA). • PasswordlessLogin—Identity verification required for customers attempting to log in to an Experience Cloud site that is set up for passwordless login. The admin controls which registered verification methods can be used, for example, email, SMS, Salesforce Authenticator, or TOTP.

Field Name	Details
	• ProfilePolicy—Session security level required at login. This verification is triggered by the Session security level required at login setting on the user's profile. • TwoFactorAuthentication—Multi-factor authentication (formerly called two-factor authentication) required at login. This verification is triggered by the Multi-Factor Authentication for User Interface Logins user permission assigned to a custom profile. Or the user permission is included in a permission set that is assigned to a user.
`Remarks`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The text the user sees on the page or in Salesforce Authenticator when prompted to verify identity. For example, if identity verification is required for a user's login, the user sees "You're trying to Log In to Salesforce." In this case, the Remarks value is "Log In to Salesforce." But if the Activity value is Apex, the Remarks value is a custom description passed by an Apex method. If the user is verifying identity using Salesforce Authenticator, the custom description also appears in the app. If the custom description isn't specified, the value is the name of the Apex method. The label is Activity Message.
`ResourceId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** If the `Activity` value is ConnectedApp, the `ResourceId` value is the ID of the connected app. The label is Connected App ID.
`SourceIp`	**Type** string **Properties** Filter, Group, Sort **Description** The IP address of the machine from which the user attempted the action that requires identity verification. For example, the IP address of the machine from where the user tried to log in or access reports. If it's a non-login action that required verification, the IP address can be different from the address from where the user logged in. This address can be an IPv4 or IPv6 address.
`Status`	**Type** picklist

Field Name	Details
	Properties Filter, Group, Restricted picklist, Sort **Description** The status of the identity verification attempt. Available values are: • AutomatedSuccess—Salesforce Authenticator approved the request for access because the request came from a trusted location. After users enable location services in Salesforce Authenticator, they can designate trusted locations. When a user trusts a location for a particular activity, such as logging in from a recognized device, that activity is approved from the trusted location for as long as the location is trusted. • Denied—The user denied the approval request in the authenticator app, such as Salesforce Authenticator. • FailedGeneralError—An error caused by something other than an invalid verification code, too many verification attempts, or authenticator app connectivity. • FailedInvalidCode—The user entered an invalid verification code. • FailedInvalidPassword—The user entered an invalid password. • FailedPasswordLockout—The user attempted to enter a password too many times. • FailedTooManyAttempts—The user attempted to verify identity too many times. For example, the user entered an invalid verification code repeatedly. • Initiated—Salesforce initiated identity verification but hasn't yet challenged the user. • InProgress—Salesforce challenged the user to verify identity and is waiting for the user to respond or for Salesforce Authenticator to send an automated response. • RecoverableError—Salesforce can't reach the authenticator app to verify identity, but it continues to retry. • ReportedDenied—The user denied the approval request in the authenticator app, such as Salesforce Authenticator, and also flagged the approval request to report to an administrator. • Succeeded—The user's identity was verified.
`UserId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user verifying identity.
`VerificationMethod`	**Type** picklist

Field Name	Details
	Properties Filter, Group, Nillable, Restricted picklist, Sort **Description** The method by which the user attempted to verify identity in the verification event. The label is Method. Available values are: • Email—Salesforce sent an email with a verification code to the address associated with the user's account. • EnableLL—Salesforce Authenticator sent a notification to the user's mobile device to enroll in Lightning Login. This value is available in API version 38.0 and later. • LL—Salesforce Authenticator sent a notification to the user's mobile device to approve login via Lightning Login. This value is available in API version 38.0 and later. • SalesforceAuthenticator—Salesforce Authenticator sent a notification to the user's mobile device to verify account activity. • Sms—Salesforce sent a text message with a verification code to the user's mobile device. SMS messaging requires a Salesforce add-on license for Identity Verification Credits. • TempCode—A Salesforce admin or a user with the Manage Multi-Factor Authentication in User Interface permission generated a temporary verification code for the user. This value is available in API version 37.0 and later. • Totp—An authenticator app generated a time-based, one-time password (TOTP) on the user's mobile device. • U2F—A U2F security key-generated required credentials for the user. This value is available in API version 38.0 and later.
`VerificationTime`	**Type** dateTime **Properties** Filter, Sort **Description** The date and time of the identity verification attempt, for example, `7/19/2025, 3:19:13 PM PDT.` The time zone is based on GMT. The label is Time.

Usage

Here are two examples of the types of API queries you can perform.

Query	String
Show verification history for a user's login record	`SELECT Activity, EventGroup, Policy, Remarks, Status, UserId,VerificationMethod,`

Query	String
	`VerificationTime FROM VerificationHistory WHERE LoginHistoryId = '0YaD000#########'`
Get detailed geographic location information for a user's verification attempt	`SELECT City, CountryIso, Latitude, Longitude, PostalCode FROM LoginGeo WHERE LoginGeoId = '0LE###############'`

VisualforceAccessMetrics

Represents summary statistics for Visualforce pages.

Supported Calls

`count()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

As of Spring '20 and later, to access VisualforceAccessMetrics, users must have the Customize Application permission.

Fields

Field	Details
`ApexPageId`	**Type** reference **Properties** Aggregate, Filter, Group, Sort **Description** The ID of the Visualforce page.
`ProfileId`	**Type** reference **Properties** Aggregate, Filter, Group, Nillable, Sort **Description** The ID of the use who viewed the Visualforce page.
`DailyPageViewCount`	**Type** int **Properties** Aggregate, Filter, Group, Nillable, Sort

Field	Details
	Description The number of views received by the specified Visualforce page.
MetricsDate	**Type** date **Properties** Aggregate, Filter, Group, Sort **Description** The date the metrics are queried.
LogDate	**Type** date **Properties** Aggregate, Filter, Group, Nillable, Sort **Description** The most recent page access date.

Usage

Use this object to query information on the Visualforce pages in your org.

```
SELECT ApexPageId, DailyPageViewCount, Id, ProfileId, MetricsDate, LogDate FROM
VisualforceAccessMetrics
```

VideoCall

Represents a video call.

One `VideoCall` record can be related to several `VideoCallRecording` records — for example, a video call can have several video recordings and a transcript. As well, one video call record can be associated with several video call participant records.

This object is available in API version 51.0 and later.

Supported Calls

`delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`

Fields

Field	Details
Description	**Type** textarea **Properties** Nillable **Description** Description of the video call. Typically, the sales rep enters the description.
DurationInSeconds	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** video call duration in seconds.
EndDateTime	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Time the video call ended, in universal time coordinated (UTC).
EventId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the event record associated with this video call. Reserved for future use.
ExternalId	**Type** string **Properties** Filter, Group, idLookup, Nillable, Sort **Description** The ID of the video call, sent by the video call provider.
HostId	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The ID of the user who hosted the meeting.
`IntelligenceScore`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The Einstein Intelligence score for the video call. Video calls with higher scores are likely to contain more relevant information. For example, video calls where product names and competitor names are mentioned tend to have a higher score.
`IsCallCoachingIncluded`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether Einstein Conversation Insights is available for this org and this user `(true)` or not `(false)`.
`IsRecorded`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the video call was recorded `(true)` or not `(false)`.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort

Field	Details
	Description The timestamp when the current user last viewed this record or list view. If this value is `null`, the user might have only accessed this record or list view (`LastReferencedDate`) but not viewed it.
`Name`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The name of the video call. Typically entered by the sales rep.
`OwnerId`	**Type** reference **Properties** Filter, Group, Sort, Update **Description** The ID of the user who created the video call.
`RelatedRecordId`	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** The ID of the account or opportunity related to this video call.
`StartDateTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the video call started, in universal time coordinated (UTC).
`VendorMeetingKey`	**Type** string **Properties** Filter, Group, Sort **Description** The vendor's ID for this video call.
`VendorMeetingUuid`	**Type** string

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** The vendor's unique identifier for this video call.
`VendorName`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The name of the vendor providing the video call software. Possible values are: • `ZOOM`

SEE ALSO:

VideoCallParticipant
VideoCallRecording

VideoCallParticipant

Represents a participant in a video call.

Participant information can come from the video call provider (for example, Zoom), or Salesforce.

This object is available in API version 51.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`

Fields

Field	Details
`Email`	**Type** string **Properties** Filter, Group, idLookup, Nillable, Sort **Description** The email address of the participant, from the video call provider.

Field	Details
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is `null`, the user might have only accessed this record or list view (`LastReferencedDate`) but not viewed it.
Name	**Type** string **Properties** Filter, Group, idLookup, Nillable, Sort **Description** The participant's name or phone number. This information is provided by the video call provider.
RelatedPersonId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The Salesforce ID of the user, lead, or contact record for this participant.
VideoCallId	**Type** reference **Properties** Filter, Group, Sort

Field	Details
	Description The ID of the video call record.

SEE ALSO:

VideoCall

VideoCallRecording

VideoCallRecording

Represents a recording from a video call, such as a video recording, a voice recording, or a transcript.

Video call recordings aren't saved in Salesforce.

This object is available in API version 51.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`

Fields

Field	Details
`DurationInSeconds`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Call duration in seconds.
`EndDateTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Time the call ended, in universal time coordinated (UTC).
`ExternalRecordingKey`	**Type** string **Properties** Filter, Group, idLookup, Nillable, Sort

Field	Details
	Description The ID of the video call recording, from the recording provider. For example, the Zoom ID of the recording. This value is unique.
`FileSizeInByte`	**Type** long **Properties** Filter, Group, Nillable, Sort **Description** The size of the video call recording, in bytes.
`FileType`	**Type** string **Properties** Filter, Group, Sort **Description** The file type of the video call recording. Possible values are: • `MP4`—Video file • `M4A`—Audio-only file • `TIMELINE`—Time stamp file in JSON format. • `TRANSCRIPT`—Transcription files in VTT format. • `CHAT`—Text file containing chat messages from the video call. • `CC`—File containing closed captions of the video call recording. File is in VTT format.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last accessed this record, a record related to this record, or a list view.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp when the current user last viewed this record or list view. If this value is `null`, the user might have only accessed this record or list view (`LastReferencedDate`) but not viewed it.

Field	Details
Name	**Type** string **Properties** Filter, Group, idLookup, Nillable, Sort **Description** The name of the video call recording, entered by the sales rep.
StartDateTime	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The start time of the video call recording.
VideoCallRecordId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the VideoCall record (the parent record).

SEE ALSO:
VideoCallParticipant
VideoCall

VoiceCall

Represents a call in Service Cloud Voice and Sales Dialer.

To manage VoiceCall records when using Service Cloud Voice, see the Telephony Integration REST API.

Supported Calls

`describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`

Fields

Field Name	Details
ActivityId	**Type** reference

Field Name	Details
	Properties Filter, Group, Nillable, Sort, Update **Description** The ID of the related activity.
CallAcceptDateTime	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time when someone accepts the call. Available only if Service Cloud Voice is enabled. Available in API version 49.0 and later.
CallCenterId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the CallCenter. Available only if Service Cloud Voice is enabled. Available in API version 49.0 and later.
CallConnectDateTime	**Type** datetime **Properties** Filter, Nillable, Sort **Description** The time and date when the call was connected.
CallDisposition	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The status of a phone call. For Dialer, this field is used to determine whether a phone call is in progress, busy, or failed. For Service Cloud Voice, the following status values are possible: • `new`—Indicates that the VoiceCall record has been created. An inbound call that is never accepted by an agent remains in this state. • `in-progress`—Indicates that the call has been accepted (or, for outbound messages, initiated) by an agent. • `transferred`—Indicates that the agent has attempted to transfer the call. Another VoiceCall record is created to track the state of the transferred

Field Name	Details
	call. This record remains in the transferred state until the call is completed. After the transferred call is completed, this VoiceCall record enters the “completed” state. • `completed`—Indicates that the call has ended.
`CallDurationInSeconds`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The total call duration in seconds.
`CallEndDateTime`	**Type** dateTime **Properties** Filter, Sort **Description** The time when a call ends.
`CallerId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the person who made the call. Available only if Service Cloud Voice is enabled. Available in API version 49.0 and later.
`CallerIdType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The number displayed for outbound calls. The possible values are: • VendorLine • CompanyNumber • LocalPresence • CustomCallerId
`CallQueuedDateTime`	**Type** dateTime **Properties** Filter, Nillable, Sort

Field Name	Details
	Description The date and time when a call is added to a queue to be routed to an agent. Available only if Service Cloud Voice is enabled. Available in API version 49.0 and later.
`CallRecordingId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the related call recording. Removed in API version 48.0 and later.
`CallResolution`	**Type** picklist **Properties** Filter, Group, Nillable, Sort, Update **Description** Indicates how the call was resolved. Possible values are: • `Resolved` Available only if Service Cloud Voice is enabled. Available in API version 49.0 and later.
`CallStartDateTime`	**Type** dateTime **Properties** Filter, Sort **Description** The time when a call starts.
`CallType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The types of call connections. The possible values are: • `Bridge` • `Callback` • `Coach` • `Inbound` • `Internal`

Field Name	Details
	• `Outbound` • `Transfer`
`ConferenceKey`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The related conference key. This field's only available if call monitoring is enabled.
`ConversationId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the Conversation. Available in API version 49.0 and later.
`CurrencyCode`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The currency used to bill the call.
`CustomerHoldDuration`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Total duration (in seconds) of all the holds that occurred during the voice call. Available only if Service Cloud Voice is enabled. Available in API version 49.0 and later.
`Description`	**Type** textarea **Properties** Nillable, Update **Description** Text field where the agent can enter a summary of the call. Available only if Service Cloud Voice is enabled. Available in API version 49.0 and later.

Field Name	Details
FromPhoneNumber	**Type** phone **Properties** Filter, Group, Sort **Description** The phone number of the user who initiated the call.
IsRecorded	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Whether a call is recorded (`true`) or not (`false`).
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp that indicates when the current user last viewed a record that is related to this VoiceCall.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp that indicates when the current user last viewed this VoiceCall. If this value is null, this record might have been only referenced (`LastReferencedDate`) and not viewed.
LongestHoldDuration	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The longest hold duration (in seconds) that occurred during the call. Available only if Service Cloud Voice is enabled. Available in API version 49.0 and later.
MediaProviderId	**Type** reference

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The ID of the related media provider.
NextCallId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the next call when a call is transferred from one agent to another. Available only if Service Cloud Voice is enabled. Available in API version 49.0 and later.
NumberOfHolds	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Number of times the customer was put on hold. Available in API version 50.0 and later. Available only if Service Cloud Voice is enabled.
OwnerId	**Type** reference **Properties** Filter, Group, Sort, Update **Description** The ID of the user who owns the phone number.
PreviousCallId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the previous call when a call is transferred from one agent to another. Available only if Service Cloud Voice is enabled. Available in API version 49.0 and later.
Price	**Type** double **Properties** Filter, Nillable, Sort

Field Name	Details
	Description The cost of the phone call.
QueueName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of the agent queue. Available only if Service Cloud Voice is enabled. Available in API version 49.0 and later.
RecipientId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the contact who received the call. Available only if Service Cloud Voice is enabled. Available in API version 49.0 and later.
RelatedRecordId	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** The ID of the related record.
ToPhoneNumber	**Type** phone **Properties** Filter, Group, Sort **Description** The recipient of the phone call.
UserId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the Dialer user.
VendorCallKey	**Type** string

Field Name	Details
	Properties Filter, Group, Nillable, idLookup, Sort **Description** The ID of the child leg of the call that's provided by the Dialer vendor.
`VendorParentCallKey`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ID of the parent leg of the call that's provided by the Dialer vendor.
`VendorType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of the Dialer vendor. The possible values are: • `ContactCenter` • `Custom` • `Twilio`
`VoiceVendorLineId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the associated Dialer vendor line.

Associated Objects

This object has the following associated objects. Unless noted, they're available in the same API version as this object.

VoiceCallFeed (Available in API version 50.0 and later.)
Feed tracking is available for the object.

VoiceCallOwnerSharingRule
Sharing rules are available for the object.

VoiceCallShare
Sharing is available for the object.

VoiceCallList

Represents a prioritized list of numbers to call.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

As of Spring '20 and later, only your Salesforce org's internal users can access this object.

Fields

Field Name	Details
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Whether the call list is active or not.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the call list.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the call list owner.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

VoiceCallListOwnerSharingRule
Sharing rules are available for the object.

VoiceCallListShare
Sharing is available for the object.

VoiceCallListItem

Represents a single phone number in a prioritized call list.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

As of Spring '20 and later, only your Salesforce org's internal users can access this object.

Fields

Field Name	Details
`CallListId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the related call list.
`Ordinal`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The order of the item in the overall call list.
`RelatedRecordId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the related record.
`State`	**Type** picklist

Field Name	Details
	Properties Create, Filter, Group, Restricted picklist, Sort, Update **Description** Whether the call list item is not called, called, or skipped.

VoiceCallQualityFeedback

Represents feedback given by a Sales Dialer user about the quality of a VoiceCall.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`FeedbackText`	**Type** textarea **Properties** Nillable **Description** The detailed feedback about a call left by a user.
`FeedbackType`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The feedback category (Call could not connect, Audio lagged, etc.) selected by a user.
`OwnerId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the user leaving the feedback.

Field Name	Details
VoiceCallId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the related VoiceCall.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

VoiceCallQualityFeedbackOwnerSharingRule
Sharing rules are available for the object.

VoiceCallQualityFeedbackShare
Sharing is available for the object.

VoiceCallRecording

Represents a call recording in Service Cloud Voice and Sales Dialer. Call recordings are saved as files in Salesforce.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Spring '20 and later, only your Salesforce org's internal users can access this object.

Fields

Field Name	Details
DurationInSeconds	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The total call duration in seconds.
IntelligenceScore	**Type** int

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The intelligence score of the recording.
IsConsented	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Whether the call recording was indicated as consented or not.
MediaContentId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the related media content, a ContentDocument. The record counts toward your org’s file storage quota.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the call recording file.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the owner of the call recording.
UploadDateTime	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time and date that the recording was uploaded.

Field Name	Details
VoiceCallId	**Type** reference **Properties** Filter, Group, Sort **Description** Required. The ID of the related phone call. The property `nillable` has been removed in API version 50.0 and later.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

VoiceCallRecordingOwnerSharingRule
Sharing rules are available for the object. Removed in API version 50.0 and later.

VoiceCallRecordingShare
Sharing is available for the object. Removed in API version 50.0 and later.

VoiceCoaching

Represents a call that is using call monitoring.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

As of Spring '20 and later, only your Salesforce org's internal users can access this object.

Fields

Field Name	Details
OwnerId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the manager monitoring the call.
RelatedRecordId	**Type** reference

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The ID of the call list owner.
`TraineeId`	**Type** reference **Properties** Filter, Group, Sort, Unique **Description** The ID of the call list owner.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

VoiceCoachingOwnerSharingRule
Sharing rules are available for the object.

VoiceCoachingShare
Sharing is available for the object.

VoiceLocalPresenceNumber

Represents a phone number with the same area code as the person who's being called.

Supported Calls

`query()`, `retrieve()`

Special Access Rules

As of Spring '20 and later, only your Salesforce org's internal users can access this object.

Fields

Field Name	Details
`CountryCode`	**Type** string **Properties** Filter, Group, idLookup, Sort

Field Name	Details
	Description The country code of the phone number.
`LastUsedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date the phone number was last used.
`PhoneNumber`	**Type** phone **Properties** Filter, Group, Sort **Description** The local presence phone number.
`Prefix`	**Type** reference **Properties** Filter, Group, Sort **Description** The area code of the phone number.

VoiceMailContent

Represents a voicemail message left by a caller to the context user.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Spring '20 and later, only your Salesforce org's internal users can access this object.

Fields

Field Name	Details
DurationInSeconds	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The duration of the voicemail message in seconds.
FirstHeardDateTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The time and date when the user first listened to the voicemail message.
MediaContentId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the related media content, a ContentDocument. The record counts toward your org's file storage quota.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name of the voicemail message.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the owner of the voicemail message.
VoiceCallId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description The ID of the related Dialer call.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

VoiceMailContentOwnerSharingRule
Sharing rules are available for the object.

VoiceMailContentShare
Sharing is available for the object.

VoiceMailGreeting

Represents a custom greeting message that plays upon reaching a user's voicemail. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

As of Spring '20 and later, only your Salesforce org's internal users can access this object.

Fields

Field Name	Details
`DurationInSeconds`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The duration of the voicemail greeting message in seconds.
`IsDefault`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field Name	Details
	Description Whether the greeting is the user's default greeting (`true`) or not (`false`).
`MediaContentId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the related content document.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the voicemail greeting message.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the voicemail greeting message owner.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

VoiceMailGreetingOwnerSharingRule
Sharing rules are available for the object.

VoiceMailGreetingShare
Sharing is available for the object.

VoiceMailMessage

Represents a prerecorded voicemail message.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

As of Spring '20 and later, only your Salesforce org's internal users can access this object.

Fields

Field Name	Details
DurationInSeconds	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The duration of a prerecorded voicemail message in seconds.
IsDefault	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Specifies whether the message is the context user's default voicemail drop message.
MediaContentId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the file.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the prerecorded voicemail message.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The owner of the prerecorded voicemail message.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

VoiceMailMessageOwnerSharingRule
Sharing rules are available for the object.

VoiceMailMessageShare
Sharing is available for the object.

VoiceUserLine

Represents a user's forwarding phone number.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

As of Spring '20 and later, only your Salesforce org's internal users can access this object.

Fields

Field Name	Details
IsCustomCallerId	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the number is a custom caller ID (`true`) or not (`false`).
IsVerified	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Reserved for future use.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort

Field Name	Details
	Description The name of the phone number.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the user who owns the phone number.
PhoneNumber	**Type** phone **Properties** Create, Filter, Group, Sort, Update **Description** The user's phone number.
UserId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the user using the phone number.
VendorVerifiedCallerIdKey	**Type** string **Properties** Create, Filter, Group, idLookup, Nillable, Sort, Update **Description** The ID for a custom phone number provided by the Sales Dialer service provider.
VoiceVendorInfoId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the related Sales Dialer service provider.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

VoiceUserLineOwnerSharingRule
Sharing rules are available for the object.

VoiceUserLineShare
Sharing is available for the object.

VoiceUserPreferences

Represents the number the user displays when making outbound calls. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

As of Spring '20 and later, only your Salesforce org's internal users can access this object.

Fields

Field Name	Details
`CallerIdType`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The number displayed for outbound calls. The possible values are: • VendorLine • CompanyNumber • LocalPresence • CustomCallerId
`DeskPhoneNumber`	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A separate phone number users can utilize as part of a call bridge.

Field Name	Details
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the phone number owner.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

VoiceUserPreferencesOwnerSharingRule
Sharing rules are available for the object.

VoiceUserPreferencesShare
Sharing is available for the object.

VoiceVendorInfo

Represents information about the Service Cloud Voice or Sales Dialer provider's vendor.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

As of Spring '20 and later, only your Salesforce org's internal users can access this object.

Fields

Field Name	Details
CorporateNumber	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** The standard number that users can choose to display when making outgoing calls.
IsActive	**Type** boolean

Field Name	Details
	Properties Defaulted on create, Filter, Group, Sort **Description** Specifies whether the vendor is active or not.
LocalPresenceDefaultNumber	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** The default routing number that's available for incoming local presence calls.
TenantConfigVersion	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The version of the Service Cloud Voice tenant configuration. Available in API version 51.0 and later.
VendorAccountKey	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The account key of the vendor.
VendorProviderName	**Type** string **Properties** Filter, Group, Sort **Description** The name of the vendor.
VendorType	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of vendor.

VoiceVendorLine

Represents a user's phone number reserved with the vendor.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

As of Spring '20 and later, only your Salesforce org's internal users can access this object.

Fields

Field Name	Details
`CallUsageInSecondsLastMonth`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** An org's total call usage last month in seconds.
`OwnerId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the user who owns the phone number.
`PhoneNumber`	**Type** phone **Properties** Filter, Group, idLookup, Sort **Description** The unique vendor phone number.
`ShouldRecord`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Reserved for future use.

Field Name	Details
`Status`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether the number is currently active or released.
`UserId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the user using the phone number.
`VoiceVendorInfoId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the Dialer vendor.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

VoiceVendorLineOwnerSharingRule
Sharing rules are available for the object.

VoiceVendorLineShare
Sharing is available for the object.

Vote

Represents a vote that a user has made on an Idea or a Reply.

Note: In API version 16.0 and earlier, SOQL queries on the Vote object only return votes for the Idea object. Starting in API version 17.0, SOQL queries return votes for both Idea and Reply.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Summer '20 and later, only authenticated internal and external users can access this object.

Fields

Field	Details
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (true) or not (false). Label is **Deleted**.
LastModifiedById	**Type** reference **Properties** Defaulted on create, Filter, Group, Sort **Description** ID of the user most recently associated with this vote.
LastModifiedDate	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** The datetime when this vote was last modified.
ParentId	**Type** reference **Properties** Group, Sort, Create, Filter **Description** ID of the Idea or Reply associated with this vote.
Type	**Type** picklist **Properties** Group, Sort, Create, Filter, Restricted picklist, Update

Field	Details
	Description Picklist that indicates the type of vote. The value `Up` indicates that the vote is a user's positive endorsement of the associated idea or reply. The value `Down` indicates that the vote is a user's negative endorsement of the associated idea or reply.

Note: If you are importing Vote data into Salesforce and need to set the value for an audit field, such as `CreatedDate`, contact Salesforce. Audit fields are automatically updated during API operations unless you request to set these fields yourself..

Usage

In version 12.0 and later, use this object to track the votes that users made on ideas. For more information on ideas, see "Understand and Work with Ideas" in the Salesforce online help.

In version 17.0 and later, you must filter using the following syntax when querying this object in a SOQL query: `ParentId =` ***`single ID`***, `Parent.Type =` ***`single Type`***, `Id =` ***`single ID`***, or `Id IN (`***`list of IDs`***). See Comparison Operators in the Salesforce SOQL and SOSL Reference Guide for a sample query.

A SOQL query must filter using one of the following Parent or Id clauses.

- `ParentId = [`***`single ID`***`]`
- `Parent.Type = [`***`single type`***`]`
- `Id = [`***`single ID`***`]`
- `Id IN = [`***`list of IDs`***`]`

SEE ALSO:

Idea

IdeaComment

WarrantyTerm

Represents warranty terms defining the labor, parts, and expenses covered, along with any exchange options, provided to rectify issues with products. This object is available in API version 50.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
Code	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A code or other identifier associated with this warranty term.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of the warranty term.
EffectiveStartDate	**Type** picklist **Properties** Create, Filter, Group, Sort, Update **Description** Date on which the warranty term became available for use. Possible values are: • InstallDate • ManufactureDate • PurchaseDate
ExchangeType	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The type of exchange offered. Possible values are: • AdvanceExchange • Loaner • ReturnExchange
Exclusions	**Type** textarea

Field	Details
	Properties Create, Nillable, Update **Description** Description of any exclusions.
ExpensesCovered	**Type** percent **Properties** Create, Filter, Nillable, Sort, Update **Description** The percentage of expenses covered.
ExpensesCoveredDuration	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The duration for which expenses are covered.
ExpensesCoveredUnitOfTime	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The unit in which expenses covered duration is measured. Possible values are: • Days • Months • Weeks • Years
IsActive	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Defines whether the warranty term is active.
IsTransferable	**Type** boolean

Field	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** Defines whether the warranty can be transferred to a new owner.
`LaborCovered`	**Type** percent **Properties** Create, Filter, Nillable, Sort, Update **Description** The percentage of labor covered.
`LaborCoveredDuration`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The duration for which labor is covered.
`LaborCoveredUnitOfTime`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The unit in which labor covered duration is measured. Possible values are: • `Days` • `Months` • `Weeks` • `Years`
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the warranty term was last modified. Its label in the user interface is `Last Modified Date`.
`LastViewedDate`	**Type** dateTime

Field	Details
	Properties Filter, Nillable, Sort **Description** The date when the warranty term was last viewed.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The warranty term's assigned owner.
PartsCovered	**Type** percent **Properties** Create, Filter, Nillable, Sort, Update **Description** The percentage of parts covered.
PartsCoveredDuration	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The duration for which parts are covered.
PartsCoveredUnitOfTime	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The unit in which parts covered duration is measured. Possible values are: • Days • Months • Weeks • Years
Pricebook2Id	**Type** reference

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the price book item associated with this warranty term.
`WarrantyDuration`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The duration of the warranty offered by this term.
`WarrantyTermName`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the warranty term.
`WarrantyType`	**Type** picklist **Properties** Create, Filter, Group, Sort, Update **Description** The type of warranty. Possible values are: • `Repair` • `Standard` • `Supplier`
`WarrantyUnitOfTime`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The unit in which the warranty duration is measured. Possible values are: • `Days` • `Months` • `Weeks`

Field	Details
	• `Years`

WaveAutoInstallRequest

Provides access the concrete object that represents an Analytics auto install request. The auto install request tracks the progress of Analytics applications created from Analytics templates by the automated process user. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Einstein Analytics must be enabled in your org. A user must have the Auto Install permission enabled.

Fields

Field	Details
`Configuration`	**Type** textarea **Properties** Create, Nillable **Description** Analytics application configuration for the auto install request.
`FailedReason`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** If the Analytics application fails to complete successfully, this value is the reason why the failure occurred. Values can be `OrganizationIncompatible`, `RetriesExhausted`, `RequestCancelled`, `AppCreateFailure`, `AppUpdateFailure`, `AppConstructionFailure`, `WaveDisabled`, `CancelFailed`, `DeleteFailed`, `DependencyFailure`, `DependencyCancelled`, `FailedToEnqueue`, and `FailedOther`
`FolderId`	**Type** reference

Field	Details
	Properties Create, Filter, Group, Nillable, Sort **Description** The ID of the Analytics application created by the auto install request.
IsLocked	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates if the auto install request is locked or not.
MayEdit	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates if the auto install request can be edited or not
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the auto install request, provided at creation by the user.
RequestLog	**Type** textarea **Properties** Create, Nillable, Update **Description** A log of the auto install progress and completion results.
RequestStatus	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The status of the auto install request. Values can be `New`, `Enqueued`, `Cancelled`, `In Progress`, `AppInProgress`, `Failed`, and `Success`.

Field	Details
`RequestType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The type of auto install request. Values can be `WaveEnable`, `OrgCompatibilityCheck`, `WaveAppCreate`, `WaveAppUpdate`, `WaveAppDelete`, and `StartDataflow`.
`TemplateApiName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** The API name of the Analytics template to create the Analytics app from.
`TemplateVersion`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** The version of the Analytics template to create the Analytics app from.

Usage

Use this object to query and create auto install requests for Analytics applications in your org. This object is useful to troubleshoot issues with templated applications that are created by the automated process user.

WebCart

Represents an online shopping cart in a store built with B2B Commerce on Lightning, with total amounts for products, shipping and handling, and taxes. This object is available in API version 49.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

The WebCart object is available only if the B2B Commerce on Lightning Experience license is enabled.

Fields

Field	Details
AccountId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the account that owns this `WebCart`.
BillingAddress	**Type** address **Properties** Filter, Nillable **Description** The address to which to bill this `WebCart`.
BillingCity	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The city of the billing address.
BillingCountry	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The country of the billing address.
BillingGeocodeAccuracy	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The accuracy rating of the geocode for the billing address. Possible values are: • `Address` • `Block` • `City` • `County` • `ExtendedZip`

Field	Details
	• NearAddress • Neighborhood • State • Street • Unknown • Zip
BillingLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The latitude of the geocode for the billing address.
BillingLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The longitude of the geocode for the billing address.
BillingPostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The postal code for the billing address.
BillingState	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The state of the billing address.
BillingStreet	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street of the billing address. Enter up to 255 characters.

Field	Details
CurrencyIsoCode	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The ISO code for the currency that's specified on the buyer's account. Default value is `USD`. Possible values are: • `EUR`—Euro • `USD`—U.S. Dollar
GrandTotalAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Sum of all cart items' `TotalAmount`, or `WebCart TotalAmount` plus `WebCart TotalTaxAmount`.
IsRepricingNeeded	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Whether the cart has changed since the last repricing. The default value is false.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort, **Description** The timestamp for when the current user last viewed a record related to this record.
LastRepricingDate	**Type** datetime **Properties** Create, Filter, Nillable, Sort, Update **Description** Date when the last repricing was done.
Name	**Type** string

Field	Details
	Properties Create, Filter, Group, idLookup, Sort, Update **Description** The name of this `WebCart` record. `Name` can be up to 255 characters.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the owner of this `WebCart`.
`PaymentGroupId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the `WebCart` payment group.
`PaymentMethodId`	**Type** reference **Properties** Create, Filter, Group, Nillable,Sort, Update **Description** The method of payment for this `WebCart`.
`PoNumber`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The purchase order number. Enter up to 80 characters.
`Status`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The status of this `WebCart`. Possible values are: • `Active` • `Checkout`

Field	Details
	• `Closed` • `PendingDelete` • `Processing`
`TotalAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** The sum of all cart items' `TotalPrice`, or `TotalProductAmount` plus `TotalChargeAmount`.
`TotalChargeAmount`	**Type** currency **Properties** Defaulted on create, Filter, Nillable, Sort **Description** The sum of all cart items' `TotalPrice` for cart items of the type `Charge`.
`TotalChargeTaxAmount`	**Type** currency **Properties** Defaulted on create, Filter, Nillable, Sort **Description** The sum of all the cart items' `TotalTaxAmount` for cart items of the type `Charge`.
`TotalLineItemsWithErrors`	**Type** int **Properties** Defaulted on create, Filter, Nillable, Sort **Description** A calculated field that shows the total number of cart line items of type `Product` with errors. This field is available in API version 50.0 and later.
`TotalListAmount`	**Type** currency **Properties** Defaulted on create, Filter, Nillable, Sort **Description** Sum of all the cart items' `TotalListPrice`.

Field	Details
TotalProductAmount	**Type** currency **Properties** Defaulted on create, Filter, Nillable, Sort **Description** The sum of all the cart items' TotalPrice for cart items of the type Product.
TotalProductCount	**Type** double **Properties** Defaulted on create, Filter, Nillable, Sort **Description** A count of all the products in the WebCart.
TotalProductTaxAmount	**Type** currency **Properties** Defaulted on create, Filter, Nillable, Sort **Description** The sum of all the cart items' TotalTaxAmount for the CartItem type Product.
TotalTaxAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** The sum of all cart items' TotalTaxAmount, or TotalProductTaxAmount plus TotalDeliveryTaxAmount.
Type	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The WebCart type. Default value is Cart. Possible values are: • Cart
UniqueProductCount	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort

Field	Details
	Description The count of unique product SKUs in the `WebCart`.
`WebStoreId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The store ID related to this `WebCart`.

Usage Notes

- In a B2B Commerce for Lightning store, customers who created custom components for adding items to carts noticed that, after adding items, the cart badge didn't refresh. A hard refresh causes the value to properly update.

Associated Objects

This object has the following associated objects. Unless it's noted, associated objects are available in the same API version as this object.

WebCartHistory
History is available for tracked fields of the object.

WebCartOwnerSharingRule
Sharing rules are available for the object.

WebCartShare
Sharing is available for the object.

WebCartHistory

WebCartHistory represents the history of changes to the values in the fields of the `WebCart` object.

For specific version information, see the documentation for `WebCart`.

Supported Calls

`describeSObjects()`, `query`, `replicate`, `retrieve()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Special Access Rules

For specific special access rules, if any, see the documentation for `WebCart`.

Fields

Field Name	Details
DataType	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Data type of the field that was changed.
Field	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Name of the field that was changed.
NewValue	**Type** anyType **Properties** Nillable, Sort **Description** New value of the field that was changed.
OldValue	**Type** anyType **Properties** Nillable, Sort **Description** Old value of the field that was changed.
WebCartId	**Type** reference **Properties** Filter, Group, Sort **Description** The unique ID of the `WebCart`.

WebLink

Represents a custom link to a URL or Scontrol.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

- To create a custom link, the client application must be logged in with the “Customize Application” permission.
- Customer Portal users can’t access this object.

Fields

Field Name	Details
Availability	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description**
Description	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the custom link. Limit is 1,000 characters.
DisplayType	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Type of display: button, link, or mass-action button.
EncodingKey	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. Encoding of parameters on the URL link.
HasMenubar	**Type** boolean

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the popup window shows a menu bar (`true`) or not (`false`).
`HasScrollbars`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the popup window shows scroll bars (`true`) or not (`false`).
`HasToolbar`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the popup window shows browser toolbars (`true`) or not (`false`). Toolbars normally contain navigation buttons like Back, Forward, and Print.
`Height`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Height of the popup in pixels.
`IsProtected`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the object is protected (`true`) or not (`false`). Protected components that have been installed in other organizations can't be linked to or referenced by components created in the subscriber organization. A developer can easily delete a protected component contained in a managed package in a future release of the package without worrying about failing installations. However, once a component is marked as unprotected and is released globally, the developer can't delete it.

Field Name	Details
IsResizable	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether users are allowed to resize the popup window (`true`) or not (`false`).
LinkType	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. Type of link (S-control or URL).
MasterLabel	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Master label for the link. Limit is 240 characters. This display value is the internal label that is not translated.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. Name to display on page.
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed

Field Name	Details
	managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix. This field can't be accessed unless the logged-in user has the Customize Application permission.
`OpenType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. How the custom link opens when clicked in a browser—NewWindow, Sidebar, or NoSidebar.
`PageOrSobjectType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** Required. For standard objects, the name of the page on which to display the custom link. For custom objects, the name of the object.
`Position`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Location on the screen where the popup should open—TopLeft, FullScreen, or None.
`RequireRowSelection`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the custom link requires a row selection (`true`) or not (`false`).
`ScontrolId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** ID of the custom s-control object (Scontrol) to link to. Can include fields as tokens within the custom s-control object. Label is **Custom S-Control ID**.
`ShowsLocation`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the popup window shows the browser's address bar containing the URL (`true`) or not (`false`).
`ShowsStatus`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Show the status bar at the bottom of the browser.
`Url`	**Type** textarea **Properties** Create, Nillable, Update **Description** Required. URL of the page to link to. Can include fields as tokens within the URL. Limit: 1,024 KB.
`Width`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Width of the popup in pixels.

Usage

Use this object to programmatically manage custom links, which allow client applications to integrate data with external URLs, an organization's intranet, or other back-end office systems. A custom link can point to:

- An external URL, such as `www.google.com` or your company's intranet.

- A custom s-control, such as a Java applet or Active-X control.

Custom links can include fields as tokens within the URL or custom s-control.

SEE ALSO:

Scontrol

WebLinkLocalization

Represents the translated value of the field label for a custom link to a URL or s-control when the Translation Workbench is enabled for your organization.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- Your organization must be using Professional, Enterprise, Developer, Unlimited, or Performance Edition and be enabled for the Translation Workbench.
- To view this object, you must have the "View Setup and Configuration" permission.

Fields

Field	Details
`LanguageLocaleKey`	**Type** picklist **Properties** Create, Filter, Nillable, Restricted picklist **Description** This field is available in API version 16.0 and earlier. It is the same as the `Language` field.
`Language`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** This field is available in API version 17.0 and later. The combined language and locale ISO code, which controls the language for labels displayed in an application. This picklist contains the following fully-supported languages:

Field	Details
	• Chinese (Simplified): `zh_CN` • Chinese (Traditional): `zh_TW` • Danish: `da` • Dutch: `nl_NL` • English: `en_US` • Finnish: `fi` • French: `fr` • German: `de` • Italian: `it` • Japanese: `ja` • Korean: `ko` • Norwegian: `no` • Portuguese (Brazil): `pt_BR` • Russian: `ru` • Spanish: `es` • Spanish (Mexico): `es_MX` Spanish (Mexico) defaults to Spanish for customer-defined translations. • Swedish: `sv` • Thai: `th` The Salesforce user interface is fully translated to Thai, but Help is in English. The following end-user only languages are available. • Arabic: `ar` • Bulgarian: `bg` • Croatian: `hr` • Czech: `cs` • English (UK): `en_GB` • Greek: `el` • Hebrew: `iw` • Hungarian: `hu` • Indonesian: `in` • Polish: `pl` • Portuguese (European): `pt_PT` • Romanian: `ro` • Slovak: `sk` • Slovenian: `sl` • Turkish: `tr` • Ukrainian: `uk` • Vietnamese: `vi`

Field	Details
	The following platform languages are available for organizations that use Salesforce exclusively as a platform. • Albanian: sq • Afrikaans: af • Amharic: am • Arabic (Algeria): ar_DZ • Arabic (Bahrain): ar_BH • Arabic (Egypt): ar_EG • Arabic (Iraq): ar_IQ • Arabic (Jordan): ar_JO • Arabic (Kuwait): ar_KW • Arabic (Lebanon): ar_LB • Arabic (Libya): ar_LY • Arabic (Morocco): ar_MA • Arabic (Oman): ar_OM • Arabic (Qatar): ar_QA • Arabic (Saudi Arabia): ar_SA • Arabic (Sudan): ar_SD • Arabic (Syria): ar_SY • Arabic (Tunisia): ar_TN • Arabic (United Arab Emirates): ar_AE • Arabic (Yemen): ar_YE • Armenian: hy • Basque: eu • Bosnian: bs • Bengali: bn • Burmese: my • Catalan: ca • Chinese (Hong Kong): zh_HK • Chinese (Singapore): zh_SG • Dutch (Belgium): nl_BE • English (Australia): en_AU • English (Canada): en_CA • English (Hong Kong): en_HK • English (India): en_IN • English (Ireland): en_IE • English (Malaysia): en_MY • English (New Zealand): en_NZ

Field	Details
	• English (Philippines): `en_PH` • English (Singapore): `en_SG` • English (South Africa): `en_ZA` • Estonian: `et` • Farsi: `fa` • French (Belgium): `fr_BE` • French (Canada): `fr_CA` • French (Luxembourg): `fr_LU` • French (Switzerland): `fr_CH` • Georgian: `ka` • German (Austria): `de_AT` • German (Belgium): `de_BE` • German (Luxembourg): `de_LU` • German (Switzerland): `de_CH` • Gujarati: `gu` • Hindi: `hi` • Icelandic: `is` • Irish: `ga` • Italian (Switzerland): `it_CH` • Kannada: `kn` • Khmer: `km` • Latvian: `lv` • Lithuanian: `lt` • Luxembourgish: `lb` • Macedonian: `mk` • Malay: `ms` • Malayalam: `ml` • Maltese: `mt` • Marathi: `mr` • Montenegrin: `sh_ME` • Romanian (Moldova): `ro_MD` • Romansh: `rm` • Serbian (Cyrillic): `sr` • Serbian (Latin): `sh` • Spanish (Argentina): `es_AR` • Spanish (Bolivia): `es_BO` • Spanish (Chile): `es_CL` • Spanish (Colombia): `es_CO`

Field	Details
	• Spanish (Costa Rica): `es_CR` • Spanish (Dominican Republic): `es_DO` • Spanish (Ecuador): `es_EC` • Spanish (El Salvador): `es_SV` • Spanish (Guatemala): `es_GT` • Spanish (Honduras): `es_HN` • Spanish (Nicaragua): `es_NI` • Spanish (Panama): `es_PA` • Spanish (Paraguay): `es_PY` • Spanish (Peru): `es_PE` • Spanish (Puerto Rico): `es_PR` • Spanish (United States): `es_US` • Spanish (Uruguay): `es_UY` • Spanish (Venezuela): `es_VE` • Swahili: `sw` • Tagalog: `tl` • Tamil: `ta` • Te reo: `mi` • Telugu: `te` • Urdu: `ur` • Welsh: `cy` • Xhosa: `xh` • Zulu: `zu` The values in this field are not related to the default locale selection.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values. • In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer.

Field	Details
	• In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.
`Value`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** The actual translated label of the custom link. Label is **Translation**.
`WebLinkId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the WebLink that is being translated.

Usage

Use this object to translate your custom links to URLs or s-controls into the different languages supported by Salesforce. Users with the Translation Workbench enabled can view custom link translations, but either the "Customize Application" or "Manage Translation" permission is required to create or update custom link translations.

SEE ALSO:

CategoryNodeLocalization

ScontrolLocalization

WebStore

Represents a B2B Commerce store.This object is available in API version 49.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

You must have the B2B Commerce license to create a store.

Fields

Field	Details
CheckoutTimeToLive	**Type** int **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** Amount of time in minutes that a B2B checkout stays active and doesn't expire. If you use a `Null` value, your checkout never expires. If you use a `0` value, checkout is disabled. This field is available in API version 50.0 and later.
CheckoutValidAfterDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** A time stamp in the default server timezone (GMT). All B2B checkouts that start before this date are considered expired. A `Null` value means that all checkouts are valid. Example format: 2020-07-14T14:27:00.000Z. This field is available in API version 50.0 and later.
CurrencyIsoCode	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The default value is `USD`. Possible values are: • `USD`—U.S. Dollar
DefaultLanguage	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The primary supported language for your store. Possible values include: • `da`— Danish • `de`— German • `en_US`— English • `es`— Spanish • `en_MX`— Spanish (Mexico)

Field	Details
	• fi— Finnish • fr— French • it— Italian • ja— Japanese • ko— Korean • nl_NL— Dutch • no— Norwegian • pt_BR— Portuguese (Brazil) • ru— Russian • sv— Swedish • th— Thai • zh_CN— Chinese (Simplified) • zh_TW— Chinese (Traditional)
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of the store.
GuestBuyerProfileId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the GuestBuyerProfile associated with the store. GuestBuyerProfile determines what buyer groups are part of the profile. The guest buyer groups then determine the entitlements and pricing of products for the guest buyer.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort

Field	Details
	Description The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`LocationId`	**Type** reference **Properties** Filter, Group, Sort **Description** The location associated with the address.
`MaxValuesPerFacet`	**Type** int **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The maximum number of values that can be added to a facet.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Name of the catalog.
`OptionsGuestBrowsingEnabled`	**Type** boolean **Properties** Create, Filter, Update **Description** Determines whether guest browsing is enabled for this store. Set the option to `True` to allow guest buyers access to products in the store.
`PaginationSize`	**Type** int **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** Dimensions of the page.
`PricingStrategy`	**Type** picklist

Field	Details
	Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Possible values are: • `LowestPrice`— Best Price • `Priority`— Priority Price. The default value is `LowestPrice`.
`StrikethroughPricebookId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the strikethrough price book.
`SupportedCurrencies`	**Type** textarea **Properties** Create, Defaulted on create, Nillable, Update **Description** Currencies supported in the store.
`SupportedLanguages`	**Type** textarea **Properties** Create, Defaulted on create, Nillable, Update **Description** Languages supported in the store.
`Type`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Type of store that can be created. Possible values are: • `B2B` • `OMS` The default value is `B2B`.

WebStoreCatalog

Represents the collection of products associated with a store.This object is available in API version 49.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

You must have the B2B Commerce license and a CMS workspace to access product media.

Fields

Field	Details
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Possible values are: • `GBP`— British Pound • `USD`— U.S. Dollar The default value is `USD`.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.

Field	Details
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** Name of the catalog.
ProductCatalogId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the catalog, containing products.
SalesStoreId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the store that the catalog is associated with. This field is unique within your org.

WebStorePricebook

Represents a store price book used in Lightning B2B Commerce. This object is available in API version 48.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is available only if the B2B Commerce on Lightning Experience license is enabled.

Fields

Field	Details
IsActive	**Type** boolean

Field	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** Determines whether the WebStorePricebook is active (`true`) or not (`false`). Default value is `false`.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, it’s possible that this record was referenced (`LastReferencedDate`) and not viewed.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name of the store price book record.
Pricebook2Id	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the price book assigned to the store.
WebStoreId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the store assigned to the price book.

Usage

Use the WebStorePricebook object to assign price books to a store. When you assign a price book to a web store, any buyer who has access to the store can price products from the assigned price books. When a store or buyer has multiple price book assignments, including prices to the same product, the price is determined by the pricing strategy of the store.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

WebStorePricebookFeed
Feed tracking is available for this object.

Wishlist

Represents a buyer-created list of `WishlistItem`s in a store that's built with B2B Commerce on Lightning. Available in API version 49.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

The Wishlist object is available only if the B2B Commerce on Lightning Experience license is enabled.

Fields

Field	Details
`AccountId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the account that owns the `Wishlist`.
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The ISO code for the currency that's specified on the buyer's account. Default value is `USD`. Possible values are:

Field	Details
	• USD—U.S. Dollar
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of this Wishlist record. Name can be up to 255 characters.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the user or group that owns the Wishlist.
WebStoreId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the WebStore related to this Wishlist.
WishlistProductCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The count of WishlistItems on this Wishlist. WishlistProductCount is a calculated field.

Associated Objects

This object has the following associated objects. Unless it's noted, associated objects are available in the same API version as this object.

WishlistOwnerSharingRule on page 3227
Sharing rules are available for the object.

WishlistShare on page 3232
Sharing is available for the object.

Usage Notes

- Wishlists aren't included in any searches.

SEE ALSO:

WishlistItem

WishlistItem

Represents an item on a `Wishlist` in a store built with B2B Commerce for Lightning. Available in API version 49.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

The WishListItem object is available only if the B2B Commerce for Lightning license is enabled.

Fields

Field	Details
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The ISO code for the currency that's specified on the buyer's account. Default value is `USD`.Possible values are: • `USD`—U.S. Dollar
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of this `WishlistItem` record. `Name` can be up to 255 characters.
`Product2Id`	**Type** reference

Field	Details
	Properties Create, Filter, Group, Sort, Update **Description** The ID of the product that is represented by the `WishlistItem`.
`WishlistId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the parent `Wishlist` of this `WishlistItem`.

SEE ALSO:

Wishlist

WorkAccess

Used to grant or restrict user access to give badge definitions. Each badge definition record must have one WorkAccess record.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Additional Considerations and Related Objects

WorkAccess is not available through Schema Builder and is not customizable. A WorkAccess record is **required** for users to **Give** BadgeDefinitions. If a WorkAccess record is not created, BadgeDefinitions will not be available to users.

The sharing of WorkAccess records is through WorkAccessShare. For each WorkBadgeDefinition record, you must create both a WorkAccess record (per WorkBadgeDefinition) and WorkAccessShare records for sharing to users or groups.

Fields

Field Name	Details
`AccessType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update

Field Name	Details
	Description Define the type of Access given to user (“Give”).
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Salesforce unique ID for owner of Access record.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Salesforce unique ID for BadgeDefinition record associated with this Access record.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

WorkAccessOwnerSharingRule
Sharing rules are available for the object.

WorkAccessShare
Sharing is available for the object.

WorkAccessShare

Used to control Givers of WorkBadgeDefinition records.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Additional Considerations and Related Objects

Related to WorkAccess Object. WorkAccess is the parent of WorkAccessShare.

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field Name	Details
AccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** CRUD Access Level (picklist values: Read Only, Read/Write, Owner).
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID for WorkAccess record.
RowCause	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Values can include: • `Manual`—The User or Group has access because a user with “All” access manually shared the WorkAccess with them. • `Owner`—The User is the owner of the WorkAccess or is in a role above the WorkAccess owner in the role hierarchy.
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** User or Group ID for WorkAccess.

WorkBadge

Represents information about who the badge was given to and which badge was given. A WorkBadge record is created for each recipient of a WorkBadgeDefinition.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Additional Considerations and Related Objects

WorkBadge is a lookup to WorkThanks. Each WorkBadge record must derive a SourceId from WorkThanks. There can be multiple WorkBadge records tied to a single WorkThanks record.

Fields

Field Name	Details
`DefinitionId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. Salesforce unique ID for the given WorkBadgeDefinition record given.
`Description`	**Type** textarea **Properties** Nillable **Description** The description of the WorkBadgeDefinition.
`GiverId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the badge giver. Can't be the same as `RecipientId`.
`ImageUrl`	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** The URL of the badge image.
`LastReferencedDate`	**Type** dateTime

Field Name	Details
	Properties Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed a record that is related to this WorkBadge.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed this WorkBadge. If this value is null, this record might have been only referenced (`LastReferencedDate`) and not viewed.
`Message`	**Type** textarea **Properties** Nillable **Description** The message accompanying the thanks badge.
`NetworkId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the community that this WorkBadge is associated with. This field is available only if digital experiences is enabled in your org.
`RecipientId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. Salesforce unique ID for User who is the Recipient of Badge. Can't be the same as `GiverId`
`RewardId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description Salesforce unique ID for Reward given with badge (if Reward Badge)
`SourceId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Salesforce unique ID for Thanks record referenced to this badge.

WorkBadgeDefinition

Represents the attributes of a badge including the badge name, description, and image. Each WorkBadge record must have a lookup to a WorkBadgeDefinition since badge attributes (like badge name) are derived from the WorkBadgeDefinition object.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Additional Considerations and Related Objects

WorkBadgeDefinition has a field called `ImageUrl` that references a DocumentID. This is a required field for creating a Badge.

To grant "giver" access to a WorkBadgeDefinition, you must also create the WorkAccess (and the related WorkAccessShare records.

Each WorkBadgeDefinition has an `ImageUrl` field that must be populated with a DocumentID of the Document record containing the badge image.

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Create, Update **Description** Required. Limit: 4000 characters. The description of the badge and what it means to receive this badge.
`GivenBadgeCount`	**Type** int

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The number of badges given per user or across all users. Note: This field can’t be added in a list view or referenced in a formula field.
`ImageUrl`	**Type** url **Properties** Create, Filter, Group, Sort, Update **Description** Required. This is the badge image that will be displayed in the UI. Use DocumentID or ImageURL.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Represents whether a WorkBadgeDefinition is active and available in the UI and API.
`IsCompanyWide`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Represents a special class of badges known as Company Badges. Company badges are visible to the entire company and visible in specific list view filters. Note: If this field is selected, everyone within the user’s network will be able to give the badge automatically. If this field is not selected, people with sharing must be added to the badge’s access list in order to give the badge.
`IsLimitPerUser`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the badge limit is per user (`true`) or across all users (`false`). The default value is `false`.

Field Name	Details
IsRewardBadge	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the badge is a reward badge (`true`) or not (`false`).
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed a record that is related to this WorkBadgeDefinition.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed this WorkBadgeDefinition. If this value is null, this record might have been only referenced (`LastReferencedDate`) and not viewed.
LimitNumber	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The badge limit per user or across all users.
LimitStartDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The start date of the badge limit. The date can be reset to the current date.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update

Field Name	Details
	Description Required. Name of the Badge. **Label:** Badge Title.
NetworkId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the community that this WorkBadgeDefinition is associated with. This field is available only if digital experiences is enabled in your org.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Salesforce User ID for User who is the Owner of the WorkBadgeDefinition record (usually the creator of the record)
RewardFundId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Salesforce unique ID for the WorkRewardFund that is associated with this WorkBadgeDefinition. WorkBadgeDefinition records with a RewardFundID indicate a Reward Badge.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

WorkBadgeDefinitionFeed
Feed tracking is available for the object.

WorkBadgeDefinitionHistory
History is available for tracked fields of the object.

WorkBadgeDefinitionOwnerSharingRule
Sharing rules are available for the object.

WorkBadgeDefinitionShare
Sharing is available for the object.

WorkCoaching

Represents a single coaching relationship between two users. One of the users is defined as the coach and the other is defined as a coachee. WorkCoaching is feed-enabled so there is a private feed available to the coach and coachee.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`CoachId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** [Required] The coach in this 1:1 coaching relationship.
`CoachedId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** [Required] The user being coached in this 1:1 coaching relationship.
`IsInactive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the coaching relationship is *`Inactive`* (`true`) or not (`false`).
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed a record that is related to this coaching relationship.

Field Name	Details
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed this coaching relationship. If this value is null, this record might have been only referenced (LastReferencedDate) and not viewed.
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** [Required] The record's name. Max length is 255 characters.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the contact who owns the WorkCoaching record.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

WorkCoachingFeed
Feed tracking is available for the object.

WorkCoachingHistory
History is available for tracked fields of the object.

WorkCoachingOwnerSharingRule
Sharing rules are available for the object.

WorkCoachingShare
Sharing is available for the object.

WorkFeedback

Represents the answer to a question that a person was asked via a feedback request. Also used to store offered feedback without linking it to a particular question.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Additional Considerations and Related Objects

- Ownership is transferred to the requester on submit for certain types (ad-hoc feedback).
- The record is read-only after the request that it's linked to is set to Submitted.
- You can't link a feedback object to a request unless you are the recipient.
- The question that the feedback is linked to must be part of the same question set that the request is linked to.

Fields

Field Name	Details
`Feedback`	**Type** textarea **Properties** Create, Nillable, Update **Description** Contains either the free-form text of the answer, or the choice selected by the user. Max length is 65536.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name of the WorkFeedback record.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner of the WorkFeedback record.
`QuestionId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort

Field Name	Details
	Description The question this answer applies to. When this feedback is linked to a request of an unsolicited type, the question ID is null.
RequestId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the request this response belongs to, in case of offered feedback.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

WorkFeedbackHistory
History is available for tracked fields of the object.

WorkFeedbackOwnerSharingRule
Sharing rules are available for the object.

WorkFeedbackShare
Sharing is available for the object.

WorkFeedbackQuestion

Represents a free-form text type or multiple choice question within a set of questions.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
Choices	**Type** textarea **Properties** Create, Nillable, Update **Description** New-line separated list of valid choices for multiple choice questions. Maximum length is 1000 characters.

Field Name	Details
Detail	**Type** textarea **Properties** Create, Nillable, Update **Description** Detailed instructions on how to answer the question.
IsConfidentialAnswer	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Answers to questions marked confidential will not be shared with the subject of the review. This field applies only to performance summaries.
IsOptional	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** If this option is selected, the question is optional and isn't required to be answered. This field applies only to performance summaries.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** A short description of the question, which can be used as a header for reports and Calibration.
Number	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The order of the question that is displayed within the question set, such as question number three in a question set that has five questions.
OwnerId	**Type** reference

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner of the WorkFeedbackQuestion.
QuestionSetId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The question set this question is a part of.
Text	**Type** textarea **Properties** Create, Update **Description** The body of the question. Max length is 16384 characters.
Type	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Allows for either a free-form text answer or a multiple choice question defined by new-line separate choices in the 'Choices' field. Valid picklist values are: • MultipleChoice • FreeText • Rating

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

WorkFeedbackQuestionHistory
History is available for tracked fields of the object.

WorkFeedbackQuestionOwnerSharingRule
Sharing rules are available for the object.

WorkFeedbackQuestionShare
Sharing is available for the object.

WorkFeedbackQuestionSet

Represents a set of questions being asked. The question set is used to link all the individual requests where different recipients were asked the same set of questions on the same subject.

In the WDC performance application, a question set defines the type of summaries and their due dates that will accompany the deployment of a specific performance summary cycle.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`DueDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date that this specific question set is expected to be submitted by the recipient. This field applies only to performance summaries.
`FeedbackType`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The description of the collection of questions that are written in context to the type of recipient answering them, relative to the subject of the summary. This field applies only to performance summaries.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the question set. Maximum length is 225 characters.
`OwnerId`	**Type** reference

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner of the WorkFeedbackQuestionSet.
`PerformanceCycleId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** If a question set is associated to a performance summary cycle, then that cycle ID is referenced in this field. This field applies only to performance summaries.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

WorkFeedbackQuestionSetHistory
History is available for tracked fields of the object.

WorkFeedbackQuestionSetOwnerSharingRule
Sharing rules are available for the object.

WorkFeedbackQuestionSetShare
Sharing is available for the object.

WorkFeedbackRequest

Represents a single feedback request on a subject or topic (question) to a single recipient in the feedback application. In the case of offered feedback, WorkFeedbackRequest represents feedback that is offered about a subject. In the performance application, WorkFeedbackRequest represents a request for feedback on a set of questions from a question set, on a subject—for the recipient to complete and submit.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Additional Considerations and Related Objects

- After a request's state is changed to Submitted, fields can't be changed, except for LastSharedDate and IsUnreadByOwner.
- If LastRemindDate is updated, a reminder notification will be sent to the request's recipient (only possible when request is in Draft state).
- When a new request is created, a notification is sent to the recipient.

- When a recipient of a request submits their feedback (Draft->Submitted), a notification will be sent to requester (except for offered feedback).
- Requester cannot modify the subject of the question set after a request is created.
- For offered feedback (to user, to manager, or both), the person who is offering feedback is both the creator of WorkFeedbackRequest as well as the recipient.

Fields

Field Name	Details
AdHocFeedback	**Type** textarea **Properties** Create, Filter, Nillable, Sort **Description** The content of the feedback.
AdHocQuestion	**Type** textarea **Properties** Create, Filter, Nillable, Sort **Description** The content of the feedback question.
Description	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The description of the WorkFeedbackRequest.
FeedbackRequestState	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** The current state of the feedback request. Allowed picklist values are: • Draft • Submitted • Declined
FeedbackType	**Type** picklist

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Specifies the type of request. Picklist values that are used for performance summaries: • Unspecified • Peer Summary • Self Summary • Manager Summary • Skip Level Summary Picklist values that are used for feedback: • Personal • Unsolicited to User • Unsolicited to Manager • Unsolicited to User and Manager • On Topic The type of the feedback determines the sharing and visibility rules that are applied to answers.
IsDeployed	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** If `true`, the feedback is part of a deployed performance summary cycle.
IsShareWithSubject	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** If `true`, the feedback is shared with the summary subject.
IsUnreadByOwner	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** If `true`, the submitted request has not been seen by the requester.

Field Name	Details
IsUnsolicited	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** If `true`, the feedback request is unsolicited feedback offered to another user.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed a record that is related to this WorkFeedbackRequest.
LastRemindDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The last time a reminder was sent to the recipient of this draft request.
LastSharedDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The last time this request was shared with another user or group.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed this WorkFeedbackRequest. If this value is null, this record might have been only referenced (`LastReferencedDate`) and not viewed.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update

Field Name	Details
	Description The name of the WorkFeedbackRequest.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner of the WorkFeedbackRequest.
PerformanceCycleId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Used by performance summaries to link to a summary cycle. This field applies only to performance summaries.
QuestionSetId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** Question set associated with the current request.
RecipientId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** User asked to provide feedback on the subject.
RelatedObjectId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** Specifies a record in the system that this feedback request is related to. Used by ad-hoc feedback to gather feedback in the context of an opportunity or WDC goal. Used by performance summaries to link to a summary cycle.

Field Name	Details
SharingScope	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The users that see the feedback. `SharingScope` can have the following values: • Nobody • Subject • Manager • SubjectAndManager
SubjectId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the user that this request (or offer) is about.
SubmitFeedbackToId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the person this performance summary feedback request (and its respective answers) is shared with. It's also the ID of the person who owns the requested subject's manager summary request. This field applies only to performance summaries.
SubmittedDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The last time (in case it was reopened by admin) this request was submitted by the recipient. This field applies only to performance summaries.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

WorkFeedbackRequestFeed
Feed tracking is available for the object.

WorkFeedbackRequestHistory
History is available for tracked fields of the object.

WorkFeedbackRequestOwnerSharingRule
Sharing rules are available for the object.

WorkFeedbackRequestShare
Sharing is available for the object.

WorkGoal

Represents the components of a goal, such as its description and associated metrics. This object has been deprecated as of API version 35.0. Use the Goal object to query information about WDC goals.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Related

WorkGoalCollaborator, WorkGoalLink, WorkGoalFeed

Fields

Field Name	Details
`ActualValue`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The actual value of the WorkGoal metric. Applicable only to WorkGoal objects of `Type`: Metric.
`ActualValueExternalUrl`	**Type** url **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Contains a URL that references WDC data synchronization for the actual value of a metric. Applicable only to WorkGoal objects of `Type`: Metric.

Field Name	Details
CompletionDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The completion date of the goal. Note: Field-level security limits access to only administrators and owners by default, and only they can complete a goal.
Description	**Type** textarea (max length 4000) **Properties** Create, Nillable, Update **Description** The description of the goal.
DueDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date the WorkGoal object is due (optional). Applicable only to WorkGoal objects of `Type`: Metric.
FlaggedAs	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The progress of the WorkGoal object. Applicable only to WorkGoal objects of `Type`: Metric. Possible values: • On Track: Progress on the metric is on track. • Behind: Progress on the metric is behind schedule. • Postponed: The metric is postponed. • Critical: Progress on the metric is critical.
ImageUrl	**Type** url **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description The URL for the goal image. The image must be stored in Documents and set as externally available. Applicable only to WorkGoal objects of `Type`: Goal.
`InitialValue`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The initial value of the WorkGoal metric. Applicable only to WorkGoal objects of `Type`: Metric and `MetricType`: Progress or Percent.
`IsKeyCompanyGoal`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Used to indicate if the goal is a key company goal. Used for the Company Goal Showcase. Applicable only to WorkGoal objects of `Type`: Goal.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed a record that is related to this goal.
`LastSyncDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The time stamp that indicates when the actual value was last synced with the associated metrics report.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed this goal.

Field Name	Details
MetricType	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The type of metric that is represented. (See values in the following list). Applies only to WorkGoal objects of `Type`: Metric. Possible values: • Progress: ActualValue / TargetValue as a percentage • Percent: the metric as a percentage only • YesNo: the completed / not completed metric as a milestone • Absolute: Deprecated
MetricTypeDataSource	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Specifies how the metric (ActualValue and CurrentValue) is updated. Applies only to WorkGoal objects of `Type`: Goal and Metric. Possible values: • Manual: indicates that the actual and target value of the metric is updated manually by the user • Rollup: indicates that the actual and target value of a goal is rolled up automatically by WDC Goals • DataSyncActualOnly: indicates that the actual value of the metric is linked to a Salesforce report
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the WorkGoal object. (Maximum length is 255.)
OverallStatus	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The overall calculated status of the WorkGoal based on `FlaggedAs` and `CompletionDate`.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the user who owns the WorkGoal.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Specifies the structural parent of the WorkGoal. For example, a goal that has a metric is represented by a WorkGoal of `Type` Metric, which has a parent of WorkGoal of Type Goal. Note: The root and the parent must be set to the parent goal for any child metrics.
`Progress`	**Type** percent **Properties** Filter, Nillable, Sort **Description** Read Only. The overall progress of the WorkGoal.
`RootId`	**Type** reference to a WorkGoal object **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Specifies the structural root of the WorkGoal. For example, a goal that has a metric is represented by a WorkGoal of `Type` Metric, which has a root of WorkGoal of `Type` Goal.
`State`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update

Field Name	Details
	Description The state of the WorkGoal object. Applies only to WorkGoal objects of `Type`: Metric. Possible values: • Draft: the draft state for the WorkGoal • Published: published state for the WorkGoal • Archived: archived state for the WorkGoal (for example, goals that no longer apply)
`TargetValue`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The target value of the WorkGoal. Applies only to WorkGoal objects of `Type`: Metric.
`Type`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of the WorkGoal object, used to differentiate between the components of a goal. (This field is used to represent components of a goal such as its description and associated metrics.) Possible values: • Goal: a goal • Metric: a metric (typically associated with goals) • Objective: an objective • KeyResult: a key result (typically associated with objectives • V2Mom: a V2MOM (pilot feature) • Vision: a vision (pilot feature — typically associated with V2MOM) • Value: a value (pilot feature - typically associated with V2MOM) • Method: a method (pilot feature - typically associated with V2MOM) • Obstacle: an obstacle (pilot feature - typically associated with V2MOM) • Measure: a measure (pilot feature - typically associated with a method) Note: Administrators can rename goals and metrics to objectives and key results, respectively. If this preference is enabled, use the `Type` Objective or KeyResult. Otherwise, use the default `Type` Goal or KeyResult.

Field Name	Details
Weight	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The weight of the goal or metric. The sum of the weights should equal 100%.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

WorkGoalFeed (API verison 35.0)
Feed tracking is available for the object.

WorkGoalHistory
History is available for tracked fields of the object.

WorkGoalOwnerSharingRule
Sharing rules are available for the object.

WorkGoalShare
Sharing is available for the object.

WorkGoalCollaborator

Represents collaborators on a WorkGoal object. This doesn't include WorkGoal followers, which is handled by Chatter Feed Follow functionality. This object has been deprecated as of API version 35.0. Use the Goal object to query information about WDC goals.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
InvitationDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date that a user was invited to become a collaborator (nill if the user was not invited).

Field Name	Details
State	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Indicates the state of the collaborating user. Whether the user has not responded, joined, or declined collaboration. The possible values are: • PendingResponse: a user who was invited to collaborate but hasn't joined or declined • Joined: a user who is collaborating on a goal (joined/commit) • Declined: a user who declined to collaborate on a goal
UserId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The collaborating user.
WorkGoalId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The WorkGoal object that this collaborator is a part of.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

WorkGoalCollaboratorHistory
History is available for tracked fields of the object.

WorkGoalCollaboratorHistory

Represents the history of changes to the values in the fields in a WorkGoalCollaborator object. Access is read-only.

Note: This object has been deprecated as of API version 35.0. Use the Goal object to query information about WDC goals in API version 35.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Fields

Field Name	Details
`DataType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Data type of the field that was changed.
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Name of the standard or custom field.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** New value of the modified field.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** Previous value of the modified field.
`WorkGoalCollaboratorId`	**Type** reference **Properties** Filter, Group, Sort

Field Name	Details
	Description ID of the WorkGoalCollaborator object that is associated with this history entry.

WorkGoalHistory

Represents the history of changes to the values in the fields of a WorkGoal. Access is read-only. This object has been deprecated as of API version 35.0. Use the GoalHistory object to query historical information for WDC goals.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** Any Type **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** Any Type **Properties** Nillable, Sort **Description** The latest value of the field before it was changed.

Field Name	Details
WorkGoalId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the Goal. Label is Goal ID.

WorkGoalLink

Represents the relationship between two goals (many to many relationship). This object has been deprecated as of API version 35.0. Use the GoalLink object to query information about the relationship between two WDC goals.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()` , `upsert()`

Fields

Field Name	Details
IsActive	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Whether the WorkGoalLink is active (`true`) or not (`false`)
LinkType	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of link
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort

Field Name	Details
	Description The auto-generated name of the goal link
SourceGoalId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the source WorkGoal object
TargetGoalId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the target WorkGoal object

WorkGoalShare

Represents a sharing entry on a WorkGoal object. This object has been deprecated as of API version 35.0. Use the GoalShare object to query information about sharing for WDC goals.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field Name	Details
AccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The user's or group's level of access to the goal. The possible values are: • Read • Edit

Field Name	Details
	• All: This value is not valid when you create, update, or delete records This field must be set to an access level that is higher than the organization's default access level for goals.
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the WorkGoal object that is associated with this sharing entry.
RowCause	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Reason that this sharing entry exists. Read-only. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Valid values include: • `Owner`—The User is the owner of the WorkGoal or is in a user role above the WorkGoal owner in the role hierarchy. • `Manual`—The User or Group has access, because a user with "All" access manually shared the WorkGoal with the user or group. • `Rule`—The User or Group has access via a WorkGoal sharing rule. • `GuestRule`—The User or Group has access via a WorkGoal guest user sharing rule.
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group that was given access to the goal. This field can't be updated.

WorkOrder

Represents field service work to be performed for a customer. This object is available in API version 36.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Work orders or Field Service must be enabled.

Fields

Field Name	Details
`AccountId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The account associated with the work order.
`Address`	**Type** address **Properties** Filter, Nillable **Description** The compound form of the address where the work order is completed.
`AssetId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The asset associated with the work order.
`AssetWarrantyId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The asset warranty term associated with the work order. This field is available in API version 50.0 and above.
`BusinessHoursId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The business hours associated with the work order.
CaseId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The case associated with the work order.
City	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The city where the work order is completed. Maximum length is 40 characters.
ContactId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The contact associated with the work order.
Country	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The country where the work order is completed. Maximum length is 80 characters.
CurrencyIsoCode	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only for orgs with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization. The label in the user interface is `Currency ISO Code`.

Field Name	Details
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** The description of the work order. Try to include the steps needed to change the work order's status to Completed.
Discount	**Type** percent **Properties** Filter, Nillable, Sort **Description** Read only. The weighted average of the discounts on all line items in the work order. It can be any positive number up to 100.
Duration	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The estimated time required to complete the work order. Specify the duration unit in the `Duration Type` field. Note: Work order duration and work order line item duration are independent of each other. If you want work order duration to automatically show the sum of the work order line items' duration, replace the Duration field on work orders with a custom roll-up summary field.
DurationInMinutes	**Type** double **Properties** Filter, Nillable, Sort **Description** The estimated duration in minutes. For internal use only.
DurationType	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The unit of the duration: Minutes or Hours.

Field Name	Details
EndDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date when the work order is completed. This field is blank unless you set up an Apex trigger or quick action to populate it. For example, you can create a quick action that sets the `EndDate` to 365 days after the `StartDate`.
EntitlementId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The entitlement associated with the work order.
GeocodeAccuracy	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Accuracy level of the geocode for the address. See Compound Field Considerations and Limitations for details on geolocation compound fields. Note: This field is available in the API only.
GrandTotal	**Type** currency **Properties** Filter, Nillable, Sort **Description** Read only. The total price of the work order with tax added.
IsClosed	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the work order is closed (`true`) or open (`false`). Tip: Use this field to report on closed versus open work orders.

Field Name	Details
`IsGeneratedFromMaintenancePlan`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** (Read Only) Indicates that the work order was generated from a maintenance plan (`true`), rather than manually created (`false`). Note: This option is deselected for work orders that were generated from maintenance plans before Summer '18.
`IsStopped`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether a milestone is paused (`true`) or counting down (`false`). This field is available only if **Enable stopped time and actual elapsed time** is selected on the Entitlement Settings page.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the work order was last modified. Its label in the user interface is `Last Modified Date`.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the work order was last viewed.
`Latitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with Longitude to specify the precise geolocation of the address where the work order is completed. Acceptable values are numbers between –90 and 90

Field Name	Details
	with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields. **Note:** This field is available in the API only.
`LineItemCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of work order line items in the work order. Its label in the user interface is `Line Items`.
`LocationId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The location associated with the work order. For example, a work site.
`Longitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with Latitude to specify the precise geolocation of the address where the work order is completed. Acceptable values are numbers between –180 and 180 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields. **Note:** This field is available in the API only.
`MaintenancePlanId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The maintenance plan associated with the work order. When the work order is auto-generated from a maintenance plan, this field automatically lists the related plan.
`MaintenanceWorkRuleId`	**Type** reference

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** ID of the maintenance work rule that generated this work order. This field is available in API version 50.0 and above.
`MilestoneStatus`	**Type** string **Properties** Group, Nillable, Sort **Description** Indicates the status of a milestone. This field is visible if an entitlement process is applied to a work order.
`MinimumCrewSize`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The minimum crew size allowed for a crew assigned to the work order. If you're not using the Field Service managed package, this field serves as a suggestion rather than a rule. If you are using the managed package, the scheduling optimizer counts the number of service crew members on a service crew to determine whether it fits a work order's minimum crew size requirement.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The work order's assigned owner.
`ParentWorkOrderId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The work order's parent work order, if it has one. Tip: Create a custom report to view a work order's child work orders.

Field Name	Details
PostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The postal code where the work order is completed. Maximum length is 20 characters.
Pricebook2Id	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The price book associated with the work order. Adding a price book to the work order lets you assign different price book entries to the work order's line items. This is only available if Product2 is enabled.
Priority	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The priority of the work order. The picklist includes the following values, which can be customized: • Low • Medium • High • Critical
ProductServiceCampaignId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The product service campaign associated with the work order.
ProductServiceCampaignItemId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description The product service campaign item associated with the work order.
RecommendedCrewSize	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The recommended number of people on the service crew assigned to the work order. For example, you might have a Minimum Crew Size of 2 and a Recommended Crew Size of 3.
ReturnOrderId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The return order associated with the work order.
ReturnOrderLineItemId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The return order line item associated with the work order.
RootWorkOrderId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** (Read only) The top-level work order in a work order hierarchy. Depending on where a work order lies in the hierarchy, its root could be the same as its parent. Note: View a work order's child work order in the Child Work Orders related list.
ServiceAppointmentCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of service appointments on the work order.

Field Name	Details
ServiceContractId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The service contract associated with the work order.
ServiceReportLanguage	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language used for all service reports and service report previews created for the work order, its service appointments, and its work order line items and their service appointments. If the field is blank, service reports are generated in the default language in Salesforce of the person creating the report. To appear as an option in the ServiceReportLanguage field, a language must be set up in Translation Workbench or be one of Salesforce's 18 fully supported languages. Rich text fields and service report section names aren't translated.
ServiceReportTemplateId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The service report template that the work order uses. If you don't specify a service report template on a work order, it uses the service report template listed on its work type. If the work type doesn't list a template or no work type is specified, the work order uses the default service report template.
ServiceTerritoryId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The service territory where the work order is taking place.
SlaExitDate	**Type** dateTime **Properties** Filter, Nillable, Sort

Field Name	Details
	Description The time that the work order exits the entitlement process.
SlaStartDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The time that the work order enters the entitlement process. You can update or reset the time if you have "Edit" permission on work orders.
StartDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date when the work order goes into effect. This field is blank unless you set up an Apex trigger or quick action to populate it. For example, you can create a quick action that sets the StartDate to the date when the Status changes to In Progress.
State	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The state where the work order is completed. Maximum length is 80 characters.
Status	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The status of the work order. The picklist includes the following values, which can be customized: • `New`—Work order was created, but there hasn't yet been any activity. • `In Progress`—Work has begun. • `On Hold`—Work is paused. • `Completed`—Work is complete. • `Cannot Complete`—Work could not be completed. • `Closed`—All work and associated activity is complete.

Field Name	Details
	• `Canceled`—Work is canceled, typically before any work began. Changing a work order's status does not affect the status of its work order line items or associated service appointments.
`StatusCategory`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The category that each `Status` value falls into. The `Status Category` field has eight default values: seven values which are identical to the default `Status` values, and a `None` value for statuses without a status category. If you create custom `Status` values, you must indicate which category it belongs to. For example, if you create a *`Waiting for Response`* value, you may decide that it belongs in the *`On Hold`* category. To learn which processes reference StatusCategory, see How are Status Categories Used?
`StopStartDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates when the milestone was paused. The label in the user interface is `Stopped Since`.
`Street`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street number and name where the work order is completed.
`Subject`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The subject of the work order. Try to describe the nature and purpose of the job to be completed. For example, "Annual On-Site Well Maintenance." Maximum length is 255 characters.

Field Name	Details
Subtotal	**Type** currency **Properties** Filter, Nillable, Sort **Description** Read only. The total of the work order line items' subtotals before discounts and taxes are applied.
SuggestedMaintenanceDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The suggested date that the work order is completed. When the work order is auto-generated from a maintenance plan, this field is automatically populated based on the maintenance plan's settings.
Tax	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** The total tax on the work order. You can enter a number with or without the currency symbol and use up to two decimal places. For example, in a work order whose total price is $100, enter $10 to apply a 10% tax.
TotalPrice	**Type** currency **Properties** Filter, Nillable, Sort **Description** Read only. The total of the work order line items' prices. This value has discounts applied but not tax.
WorkOrderNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** An eight-digit, auto-generated number that identifies the work order.

Field Name	Details
`WorkTypeId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The work type associated with the work order. When a work type is selected, the work order automatically inherits the work type's `Duration`, `Duration Type`, and required skills.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

WorkOrderFeed
Feed tracking is available for the object.

WorkOrderHistory
History is available for tracked fields of the object.

WorkOrderOwnerSharingRule
Sharing rules are available for the object.

WorkOrderShare
Sharing is available for the object.

WorkOrderHistory

Represents the history of changes made to tracked fields on a work order. This object is available in API version 36.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Special Access Rules

Work orders or Field Service must be enabled in your organization, and field tracking for work order fields must be configured.

Fields

Field Name	Details
`DataType`	**Type** picklist

Field Name	Details
	Properties Filter, Group, Nillable, Restricted picklist, Sort **Description** Data type of the field that was changed.
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The value of the field before it was changed.
`WorkOrderId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the work order being tracked. The history is displayed on the detail page for this record.

WorkOrderLineItem

Represents a subtask on a work order in field service. This object is available in API version 36.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Work orders or Field Service must be enabled.

Fields

Field Name	Details
`Address`	**Type** address **Properties** Filter, Nillable **Description** The compound form of the address where the line item is completed.
`AssetId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The asset associated with the work order line item. The asset is not automatically inherited from the parent work order.
`AssetWarrantyId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The asset warranty term associated with the work order line item. This field is available in API version 50.0 and above.
`City`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The city where the line item is completed. Maximum length is 40 characters.

Field Name	Details
Country	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The country where the line item is completed. Maximum length is 80 characters.
CurrencyIsoCode	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Available only for orgs with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization. The label in the user interface is `Currency ISO Code`.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** The description of the work order line item. Try to describe the steps needed to mark the line item Completed.
Discount	**Type** percent **Properties** Create, Filter, Nillable, Sort, Update **Description** The percent discount to apply to the line item. You can enter a number with or without the percent symbol, and you can use up to two decimal places.
Duration	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The estimated time required to complete the line item. Specify the duration unit in the `Duration Type` field. Note: Work order duration and work order line item duration are independent of each other. If you want work order duration to

Field Name	Details
	automatically show the sum of the work order line items' duration, replace the Duration field on work orders with a custom roll-up summary field.
`DurationInMinutes`	**Type** double **Properties** Filter, Nillable, Sort **Description** The estimated duration in minutes. For internal use only.
`DurationType`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The unit of the duration: Minutes or Hours.
`EndDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date on which the line item is completed. This field is blank unless you set up an Apex trigger or quick action to populate it. For example, you can create a quick action that sets the EndDate to 365 days after the StartDate.
`GeocodeAccuracy`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The level of accuracy of a location's geographical coordinates compared with its physical address. Usually provided by a geocoding service based on the address's latitude and longitude coordinates. Note: This field is available in the API only. Possible values are: • `Address` • `Block` • `City` • `County` • `ExtendedZip`

Field Name	Details
	• `NearAddress` • `Neighborhood` • `State` • `Street` • `Unknown` • `Zip`
`IsClosed`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the line item has been closed. Changing the line item's status to `Closed` causes this checkbox to be selected in the user interface (sets `IsClosed` to `true`). Tip: Use this field to report on closed versus open work order line items.
`IsGeneratedFromMaintenancePlan`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Identifies whether the work order line item is generated from a maintenance plan.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the line item was last modified. Its label in the user interface is `Last Modified Date`.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the line item was last viewed.

Field Name	Details
Latitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `Longitude` to specify the precise geolocation of the address where the line item is completed. Acceptable values are numbers between –90 and 90 with up to 15 decimal places. Note: This field is available in the API only.
LineItemNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** An auto-generated number that identifies the work order line item. Each work order's line items start at 1.
ListPrice	**Type** currency **Properties** Filter, Nillable, Sort **Description** The price of the line item (product) as listed in its corresponding price book entry. If a price book entry isn't specified, the list price defaults to zero.
LocationId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A location associated with the work order line item. For example, a work site.
Longitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `Latitude` to specify the precise geolocation of the address where the line item is completed. Acceptable values are numbers between –180 and 180 with up to 15 decimal places.

Field Name	Details
	Note: This field is available in the API only.
MaintenancePlanId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The maintenance plan associated with the work order line item.
MaintenanceWorkRuleId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the maintenance work rule that generated this line item. This field is available in API version 50.0 and above.
MinimumCrewSize	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The minimum crew size allowed for a crew assigned to the line item. If you're not using the Field Service managed package, this field serves as a suggestion rather than a rule. If you are using the managed package, the scheduling optimizer counts the number of service crew members on a service crew to determine whether it fits a work order line item's minimum crew size requirement.
OrderId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The order associated with the line item. For example, you may need to order replacement parts before you can complete the line item.
ParentWorkOrderLineItemId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description The line item's parent work order line item, if it has one. Tip: Create a custom report to view a line item's child line items.
PostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The postal code where the line item is completed. Maximum length is 20 characters.
PricebookEntryId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The price book entry (product) associated with the line item. The label in the user interface is `Product`. This field's lookup search only returns products that are included in the work order's price book.
Priority	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The priority of the line item. The picklist includes the following values, which can be customized: • `Low` • `Medium` • `High` • `Critical`
Product2Id	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** (Read only) The product associated with the price book entry. This field is not available in the user interface. For best results, use the `PricebookEntryId` field in any custom code or layouts.

Field Name	Details
ProductServiceCampaignId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The product service campaign associated with the work order line item.
ProductServiceCampaignItemId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The product service campaign item associated with the work order line item.
Quantity	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Number of units of the line item included in the associated work order.
RecommendedCrewSize	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The recommended number of people on the service crew assigned to the line item. For example, you might have a Minimum Crew Size of 2 and a Recommended Crew Size of 3.
ReturnOrderId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The return order associated with the work order line item.
ReturnOrderLineItemId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description The return order line item associated with the work order line item.
`RootWorkOrderLineItemId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** (Read only) The top-level line item in a work order line item hierarchy. Depending on where a line item lies in the hierarchy, its root could be the same as its parent. Note: View a line item's child line items in the Child Work Order Line Items related list.
`ServiceAppointmentCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of service appointments on the work order line item.
`ServiceReportTemplateId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The service report template that the line item uses. If you don't specify a service report template on a work order line item, it uses the service report template listed on its work type. If the work type doesn't list a template or no work type is specified, the line item uses the default service report template.
`ServiceTerritoryId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The service territory where the line item is completed.
`StartDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update

Field Name	Details
	Description The date on which the line item goes into effect. This field is blank unless you set up an Apex trigger or quick action to populate it. For example, you can create a quick action that sets the StartDate to the date when the Status changes to In Progress.
`State`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The state where the line item is completed. Maximum length is 80 characters.
`Status`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The status of the line item. The picklist includes the following values, which can be customized: • `New`—Line item was created, but there hasn't yet been any activity. • `In Progress`—Work has begun. • `On Hold`—Work is paused. • `Completed`—Work is complete. • `Cannot Complete`—Work could not be completed. • `Closed`—All work and associated activity is complete. • `Canceled`—Work is canceled, typically before any work began.
`StatusCategory`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The category that each `Status` value falls into. The `Status Category` field has eight default values: seven values which are identical to the default `Status` values, and a `None` value for statuses without a status category. If you create custom `Status` values, you must indicate which category it belongs to. For example, if you create a *`Waiting for Response`* value, you may decide that it belongs in the *`On Hold`* category. To learn which processes reference StatusCategory, see How are Status Categories Used?

Field Name	Details
Street	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street number and name where the line item is completed.
Subject	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A word or phrase describing the line item.
Subtotal	**Type** currency **Properties** Filter, Nillable, Sort **Description** (Read only) The line item’s unit price multiplied by the quantity.
SuggestedMaintenanceDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Date when maintenance work is planned.
TotalPrice	**Type** currency **Properties** Filter, Nillable, Sort **Description** Read only. The line item’s subtotal with discounts applied.
UnitPrice	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update

Field Name	Details
	Description Initially, the unit price for a work order line item is the line item's list price from the price book, but you can change it.
`WorkOrderId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The line item's parent work order. Because work order line items must be associated with a work order, this is a required field.
`WorkTypeId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The work type associated with the line item. When a work type is selected, the line item automatically inherits the work type's `Duration`, `Duration Type`, and required skills.

Usage

A work order line item is a child record of a work order. It represents a specific subtask on a work order.

For example, suppose a customer purchased a truck from you. The truck is represented as an asset in your Salesforce org. After some time, the truck needs both headlight bulbs replaced. Here's one way that you can use work orders and work order line items to track the repair.

1. Create a work order named "Replace Headlight Bulbs" from the asset record detail page.
2. Add three work order line items to the work order: "Replace Left Headlight Bulb," "Replace Right Headlight Bulb," and "Test Headlights."
3. Assign the work order to a technician via a queue.
4. As the technician completes each line item, he or she marks the item `Completed`.
5. When all the line items are complete, the technician marks the work order `Completed`.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

WorkOrderLineItemFeed
Feed tracking is available for the object.

WorkOrderLineItemHistory
History is available for tracked fields of the object.

WorkOrderLineItemHistory

Represents the history of changes made to tracked fields on a work order line item. This object is available in API version 36.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Special Access Rules

Work orders or Field Service must be enabled in your organization, and field tracking for work order line item fields must be configured.

Fields

Field Name	Details
DataType	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Data type of the field that was changed.
Field	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
NewValue	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
OldValue	**Type** anyType **Properties** Nillable, Sort

Field Name	Details
	Description The value of the field before it was changed.
WorkOrderLineItemId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the work order line item being tracked. The history is displayed on the detail page for this record.

WorkOrderLineItemStatus

Represents a possible status of a work order line item in field service.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
ApiName	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The API name of the status value.
IsDefault	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates that the status value is the default status on work orders. Only one status value can be the default.

Field Name	Details
`MasterLabel`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The label for the picklist value that appears in the UI.
`SortOrder`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The value's position in the drop-down list of values in the UI.
`StatusCode`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The status category that the value corresponds to. The Status Category field has seven values which are identical to the default Status values.

Usage

The Status field on work order line items comes with the following values:

- New—Line item was created, but there hasn't yet been any activity.
- In Progress—Work has begun.
- On Hold—Work is paused.
- Completed—Work is complete.
- Cannot Complete—Work could not be completed.
- Closed—All work and associated activity is complete.
- Canceled—Work is canceled, typically before any work began.

The WorkOrderLineItemStatus object corresponds to the Status field. Adding a value to the Status field—for example, Canceled By Customer—creates a work order line item status record, and vice versa.

Note: Work order line items also come with a StatusCategory field whose values are identical to the default Status values. If you create custom Status values, you must indicate which category it belongs to. For example, if you create a *`Customer Absent`* value, you may decide that it belongs in the *`Cannot Complete`* category. To learn which processes reference StatusCategory, see How are Status Categories Used?

WorkOrderShare

Represents a sharing entry on a work order. This object is available in API version 36.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Work orders or Field Service must be enabled in your organization. External users can't access this object.

Fields

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the user or group has to the work order. The possible values are: • *`Read`* • *`Edit`* • *`All`* (This value isn't valid for create or update calls.) Set to an access level that is at least equal to the organization's default work order access level.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The work order associated with the sharing entry.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The reason why this sharing entry exists. You can write to this field only when its value is omitted or set to `Manual` (default). Valid values include:

Field Name	Details
	• `Manual`—The User or Group has access because a user with "All" access manually shared the work order. • `Owner`—The User is the owner of the work order. • `Rule`—The User or Group has access via a work order sharing rule. • `GuestRule`—The User or Group has access via a work order guest user sharing rule. • `LpuImplicit`—The User has access to records owned by high-volume Experience Cloud site users via a share group.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** (Read Only) ID of the user or group that has access to the work order.

WorkOrderStatus

Represents a possible status of a work order in field service.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
`ApiName`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The API name of the status value.
`IsDefault`	**Type** boolean

Field Name	Details
	Properties Defaulted on create, Filter, Group, Sort **Description** Indicates that the status value is the default status on work orders. Only one status value can be the default.
MasterLabel	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The label for the picklist value that appears in the UI.
SortOrder	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The value's position in the drop-down list of values in the UI.
StatusCode	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The status category that the value corresponds to. The Status Category field has seven values which are identical to the default Status values.

Usage

The Status field on work orders comes with the following values:

- New—Work order was created, but there hasn't yet been any activity.
- In Progress—Work has begun.
- On Hold—Work is paused.
- Completed—Work is complete.
- Cannot Complete—Work could not be completed.
- Closed—All work and associated activity is complete.
- Canceled—Work is canceled, typically before any work began.

The WorkOrderStatus object corresponds to the Status field. Adding a value to the Status field—for example, Canceled By Customer—creates a work order status record, and vice versa.

Note: Work orders also come with a StatusCategory field whose values are identical to the default Status values. If you create custom Status values, you must indicate which category it belongs to. For example, if you create a *Customer Absent* value, you may decide that it belongs in the *Cannot Complete* category. To learn which processes reference StatusCategory, see How are Status Categories Used?

WorkPerformanceCycle

Represents feedback that is gathered to assess the performance of a specific set of employees.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`ActivityFrom`	**Type** date **Properties** Create, Filter, Group, Sort, Update **Description** The date that you want to start filtering the WDC objects to help requesters create accurate summaries. The start of the evaluation period.
`ActivityTo`	**Type** date **Properties** Create, Filter, Group, Sort, Update **Description** The date that you want to stop filtering the WDC objects to help requesters create accurate summaries. The end of the evaluation period.
`CurrentTask`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The current task that the performance summary cycle is engaged in, including deploying and sharing.
`LastManagerRequestsSharedDate`	**Type** dateTime

Field Name	Details
	Properties Create, Filter, Nillable, Sort, Update **Description** The date when all manager requests are set to be shared.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed a record that is related to this WorkPerformanceCycle.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed this WorkPerformanceCycle. If this value is null, this record might have been only referenced (`LastReferencedDate`) and not viewed.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the performance summary cycle that employees will participate in. This name is created by the administrator and is visible on all respective notifications and in the UI.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner of the WorkPerformanceCycle.
`State`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update

Field Name	Details
	Description The state that the performance summary cycle is in. Available pick list values: • Setup: The summary is in draft. • In Progress: The summary is deployed and people are answering the questions that were created. • Finished: The summary is no longer in progress. • Error: The summary encountered an error.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

WorkPerformanceCycleFeed
Feed tracking is available for the object.

WorkPerformanceCycleHistory
History is available for tracked fields of the object.

WorkPerformanceCycleOwnerSharingRule
Sharing rules are available for the object.

WorkPerformanceCycleShare
Sharing is available for the object.

WorkReward

Used to store reward codes tied to a Reward Fund. Reward Funds must have at least one WorkReward record.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

You must have the Reward permission enabled in order to use the Rewards feature, including WorkRewardFund and WorkReward.

Additional Considerations and Related Objects

WorkReward is a lookup to WorkRewardFund. WorkRewardFund must have at least one WorkReward record to be available for use. Each WorkBadge record with a `RewardId` indicates a reward badge given to a Recipient.

Fields

Field Name	Details
`Code`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Represents a singe reward code tied to a RewardFundId.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Represents the User ID of Owner of WorkReward record
`RecipientId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Salesforce User ID for User associated with this WorkReward record.
`RedemptionDisclaimer`	**Type** textarea **Properties** Nillable **Description** The disclaimer information about the WorkReward.
`RedemptionInfo`	**Type** textarea **Properties** Nillable **Description** The instructions for redeeming the WorkReward.
`RedemptionUrl`	**Type** textarea **Properties** Nillable

Field Name	Details
	Description The URL for redeeming the WorkReward.
RewardFundId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Salesforce unique ID for WorkRewardFund record that is associated with WorkReward record.
RewardFundTypeId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Salesforce unique ID of the WorkRewardFundType associated with the WorkReward.
Value	**Type** double **Properties** Filter, Nillable, Sort **Description** The value of the WorkReward.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

WorkRewardHistory
History is available for tracked fields of the object.

WorkRewardOwnerSharingRule
Sharing rules are available for the object.

WorkRewardShare
Sharing is available for the object.

WorkRewardFund

Represents a Reward Fund and describes the Reward Fund attributes.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

To use the Rewards feature, including WorkRewardFund and WorkReward, you must have the Reward permission enabled. To create Rewards, the user must have Create on WorkRewardFund, which is not a standard permission.

Additional Considerations and Related Objects

WorkReward is a lookup to WorkRewardFund. WorkRewardFund must have at least one WorkReward record available. Each WorkBadgeDefinition with a RewardFundId is a “Reward Badge.”

Fields

Field Name	Details
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the WorkRewardFund is active (`true`) or not (`false`).
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed a record that is related to this WorkRewardFund.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed this WorkRewardFund. If this value is null, this record might have been only referenced (`LastReferencedDate`) and not viewed.
`Name`	**Type** string

Field Name	Details
	Properties Create, Filter, Group, idLookup, Sort, Update **Description** Required. Name of the Reward Fund.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Salesforce unique ID of User who is the Owner of the WorkRewardFund record.
`RewardFundTypeId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Salesforce unique ID of the WorkRewardFundType that is associated with the WorkRewardFund.
`TotalCodeCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Total reward codes that are available in the WorkRewardFund. Derived from WorkReward records that are associated with the WorkRewardFund.
`Type`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** RewardType of the WorkRewardFund. Default is Amazon.com.
`UsedCodeCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Total reward codes that are used in the WorkRewardFund. Derived from the total assigned WorkReward records that are associated with the WorkRewardFund.

Field Name	Details
`Value`	**Type** currency **Properties** Create, Filter, Sort, Update **Description** Value of each of the reward codes in the WorkRewardFund.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

WorkRewardFundFeed
Feed tracking is available for the object.

WorkRewardFundHistory
History is available for tracked fields of the object.

WorkRewardFundOwnerSharingRule
Sharing rules are available for the object.

WorkRewardFundShare
Sharing is available for the object.

WorkRewardFundType

Represents the type of WorkRewardFund object.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`CreditSystem`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The credit system that is used by the WorkRewardFundType object (gift codes or points). If points are selected, the reward message will not consider the `CurrencyCode` field.

Field Name	Details
CurrencyCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The currency code of the WorkRewardFundType
IsActive	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Whether the WorkRewardFundType is active and available in the UI
IsPredefined	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Whether the WorkRewardFundType is predefined (`true`) or not (`false`)
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed a record that is related to this WorkRewardFundType.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed this WorkRewardFundType. If this value is null, this record might have been only referenced (`LastReferencedDate`) and not viewed.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update

Field Name	Details
	Description The name of the WorkRewardFundType
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the WorkRewardFundType owner
`RedemptionDisclaimer`	**Type** textarea **Properties** Create, Nillable, Update **Description** The redemption disclaimer text for the WorkRewardFundType
`RedemptionInfo`	**Type** textarea **Properties** Create, Nillable, Update **Description** Redemption text for the WorkRewardFundType
`RedemptionUrl`	**Type** textarea **Properties** Create, Nillable, Update **Description** The URL that's linked to the redemption
`UploadCodeColumn`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The column where the reward code is contained in the CSV file. The upload uses the second value by default.
`UploadValueColumn`	**Type** int

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The column where the reward value is contained in the CSV file. The upload uses the third column by default.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

WorkRewardFundTypeFeed
Feed tracking is available for the object.

WorkRewardFundTypeHistory
History is available for tracked fields of the object.

WorkRewardFundTypeOwnerSharingRule
Sharing rules are available for the object.

WorkRewardFundTypeShare
Sharing is available for the object.

WorkThanks

Represents the source and message of a thanks post.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Additional Considerations and Related Objects

WorkBadge is a lookup to WorkThanks. Each WorkBadge record must derive a SourceId from WorkThanks.

Fields

Field Name	Details
`FeedItemId`	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description ID of the FeedItem related to the thanks badge.
GiverId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Salesforce user ID for the giver of the Thanks record.
Message	**Type** textarea **Properties** Create **Description** Required. Message associated with the Thanks record.
NetworkId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the community that this WorkThanks is associated with. This field is available only if digital experiences is enabled in your org.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Salesforce user ID for the owner of the badge record (typically the same user as the giver of the record).

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

WorkThanksOwnerSharingRule
Sharing rules are available for the object.

WorkThanksShare
Sharing is available for the object.

WorkType

Represents a type of work to be performed in Field Service and Lightning Scheduler. Work types are templates that can be applied to work order or work order line items. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service must be enabled.

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** The description of the work type. Try to add details about the task or tasks that this work type represents.
`DurationType`	**Type** picklist **Properties** Create, Filter, Group, Defaulted on create, Restricted picklist, Sort, Update **Description** The unit of the `Estimated Duration`: Minutes or Hours.
`EstimatedDuration`	**Type** double **Properties** Create, Filter, Sort, Update **Description** The estimated length of the work. The estimated duration is in minutes or hours based on the value selected in the `Duration Type` field.
`LastReferencedDate`	**Type** dateTime

Field Name	Details
	Properties Filter, Nillable, Sort **Description** The date when the work type was last modified. Its label in the user interface is `Last Modified Date`.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the work type was last viewed by the current user.
`MinimumCrewSize`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The minimum crew size allowed for a crew assigned to the work. Work orders and work order line items inherit their work type’s minimum crew size. If you’re not using the Field Service managed package, this field serves as a suggestion rather than a rule. If you are using the managed package, the scheduling optimizer counts the number of service crew members on a service crew to determine whether it fits the minimum crew size requirement.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the work type. Try to use a name that helps users quickly understand the type of work orders that can be created from the work type. For example, “Annual Refrigerator Maintenance” or “Valve Replacement.”
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The work type’s owner.

Field Name	Details
`RecommendedCrewSize`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The recommended number of people on the service crew assigned to the work. For example, you might have a Minimum Crew Size of 2 and a Recommended Crew Size of 3. Work orders and work order line items inherit their work type's recommended crew size.
`ServiceReportTemplateId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The service report template associated with the work type. When users create service reports from a work order or work order line item that uses this work type, the reports will use this template.
`ShouldAutoCreateSvcAppt`	**Type** boolean **Properties** Create, Filter, Group, Defaulted on create, Sort, Update **Description** Select this option to have a service appointment automatically created on work orders and work order line items that use the work type. Note: • By default, the Due Date on auto-created service appointments is seven days after the created date. Admins can adjust this offset from the Field Service Settings page in Setup. • If a work type with the Auto-Create Service Appointment option selected is added to an existing work order or work order line item, a service appointment is only created for the work order or work order line item if it doesn't yet have one. • If someone updates an existing work type by selecting the Auto-Create Service Appointment option, service appointments aren't created on work orders and work order line items that were already using the work type.

Usage

Adding a work type to a work order or work order line item causes the record to inherit the work type's duration values and required skills and products.

Note:

- If needed, you can update the duration values and required skills and products on a work order or work order line item after they're inherited from the work type.
- If a work order or work order line item already has required skills or products, associating it with a work type doesn't cause it to inherit the work type's requirements.
- Customizations to required skills or products, such as validation rules or Apex triggers, are not carried over from work types to work orders and work order line items.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

WorkTypeFeed
Feed tracking is available for the object.

WorkTypeHistory
History is available for tracked fields of the object.

WorkTypeOwnerSharingRule
Sharing rules are available for the object.

WorkTypeShare
Sharing is available for the object.

WorkTypeGroup

Represents a grouping of work types used to categorize types of appointments available in Lightning Scheduler, or to define scheduling limits in Field Service. This object is available in API version 45.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`AdditionalInformation`	**Type** multipicklist **Properties** Create, Filter, Nillable, Update

Field	Details
	Description Additional information about the types of appointments this work type group represents.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** A description of this work type group.
GroupType	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** The category of this work type group. Possible values are: • `Capacity`—A group of work types used to define a work capacity limit in Field Service. • `Default`—A non-capacity group of work types used in Lightning Scheduler.
IsActive	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this work type group can be used for appointment scheduling or work capacity limits. A work type can belong to only one active work type group of type Capacity.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the current user last viewed a record related to this object.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this object.

Field	Details
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of this work type group.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the user who created this record.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

WorkTypeGroupFeed
Feed tracking is available for the object.

WorkTypeGroupHistory
History is available for tracked fields of the object.

WorkTypeGroupOwnerSharingRule
Sharing rules are available for the object.

WorkTypeGroupShare
Sharing is available for the object.

WorkTypeGroupMember

Represents the relationship between a work type and the work type group it belongs to. This object is available in API version 45.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the current user last viewed a record related to this object.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this object.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** Autogenerated number identifying the work type group membership. It uses the format ########.
WorkTypeGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the work type group that this record belongs to.
WorkTypeId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the work type that this record corresponds to.

Associated Objects

This object has the following associated objects. Unless noted, they are available in the same API version as this object.

WorkTypeGroupMemberFeed

Feed tracking is available for the object.

WorkTypeGroupMemberHistory

History is available for tracked fields of the object.

CHAPTER 9 Custom Objects

This section provides details on custom objects, entities that support custom objects, and their standard fields.

When you create or enable features for a custom object, Salesforce creates entities to support your custom object. For example, when you enable sharing rules for a custom object, Salesforce creates a *`MyObjectName`*__Share object.

To verify the complete list of fields for an object or entity, you can use a describe call from the API, or inspect with an appropriate tool, for example, inspecting the WSDL or using a schema viewer.

*Custom Metadata Type*__mdt

Represents a custom metadata record. This object is available in API version 34.0 and later.

The object name is a variable with the syntax *`Custom Metadata Type`*__mdt, where *`Custom Metadata Type`* is the `Object Name` for the custom metadata type associated with the custom metadata record. For example, `PicklistUsage__mdt` represents a custom metadata record based on the `PicklistUsage` custom metadata type.

Supported Calls

`describeSObjects()`, `describeLayout()`, `query()`, `retrieve()`

Fields

Field	Details
`Custom Field__c`	**Type** Any Type **Properties** Filter, Group, Nillable, Sort **Description** A custom field on the record.

Field	Details
`DeveloperName`	**Type** string **Properties** Defaulted on create, Filter, Group, Sort **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization.
`isProtected`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** When a custom metadata type's records are released in a managed package, access to them is limited in specific ways. • Code that's in the same managed package as custom metadata records can read the records. • Code that's in the same managed package as custom metadata types can read the records that belong to that type. • Code that's in a managed package that doesn't contain either the type or the protected record can't read the protected records. • Code that the subscriber creates and code that's in an unmanaged package can't read the protected records. • The developer can modify protected records only with a package upgrade. The subscriber can't read or modify protected records. The developer name of a protected record can't be changed after release. Records that are hidden by these access rules are also unavailable to REST, SOAP, SOQL, and Setup.
`Label`	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** The custom metadata record label. This label value is always the same as the `MasterLabel` value.

Field	Details
`Language`	**Type** string **Properties** Filter, Group, restrictedPicklist, Sort **Description** The language of the custom metadata record. This value is always the default language of the developing organization.
`MasterLabel`	**Type** string **Properties** Filter, Group, Sort **Description** The master label for the custom metadata record.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation.
`QualifiedApiName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A concatenation of the namespace prefix and developer name. The format is *`NamespacePrefix__DeveloperName`*.

*Custom Object*__C

Represents a custom object.

The custom object name is a variable with the syntax `Custom Object__c`, where `Custom Object` is the object's Name associated with the record, followed by two underscores and `c`. For example, a custom object labeled "Issue" in the Salesforce user interface is `Issue__c` in that organization's WSDL.

System fields and properties behave the same on custom objects as they do on standard objects, unless otherwise noted in the following details.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`ConnectionReceivedId`	**Type** reference **Properties** Filter, Nillable **Description** ID of the PartnerNetworkConnection that shared this record with your organization. This field is available if you enabled Salesforce to Salesforce.
`ConnectionSentId`	**Type** reference **Properties** Filter, Nillable **Description** ID of the PartnerNetworkConnection that you shared this record with. This field is available if you enabled Salesforce to Salesforce. This field is supported using API versions earlier than 15.0. In all other API versions, this field's value is null. You can use the new PartnerNetworkRecordConnection object to forward records to connections.
`CreatedById`	**Type** reference **Properties** Aggregatable, Defaulted on create, Filter, Group, Sort **Description** ID of the User who created this record.
`CreatedDate`	**Type** dateTime **Properties** Aggregatable, Defaulted on create, Filter, Sort **Description** Date and time when this record was created.
`CurrencyIsoCode`	**Type** picklist

Field	Details
	Properties Defaulted on createFilter, Group, Restricted picklist, Sort **Description** Available only for orgs with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization.
`Id`	**Type** Id **Properties** Aggregatable, Defaulted on create, Filter, Group, idLookup, Sort **Description** Globally unique string that identifies a record. For information on IDs, see ID Field Type.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`LastActivityDate`	**Type** dateTime **Properties** Filter, Group, Nillable, Sort **Description** Value is one of the following, whichever is the most recent: • Due date of the most recent event logged against the object. • Due date of the most recently closed task associated with the object.
`LastModifiedDate`	**Type** dateTime **Properties** Aggregatable, Defaulted on create, Filter, Sort **Description** Date and time when a user last modified this record.
`LastModifiedById`	**Type** reference **Properties** Aggregatable, Defaulted on create, Filter, Group, Sort

Field	Details
	Description ID of the User who last updated this object.
`LastReferencedDate`	**Type** dateTime **Properties** Aggregatable, Filter, Sort, Nillable **Description** The timestamp for when the current user last viewed a record related to this object.
`LastViewedDate`	**Type** dateTime **Properties** Aggregatable, Filter, Sort, Nillable **Description** The timestamp for when the current user last viewed this object. If this value is null, this object might only have been referenced (`LastReferencedDate`) and not viewed.
`Name`	**Type** string on page 32 **Properties** Aggregatable, Create, Defaulted on create, Filter, Group, idLookup, Sort, Update **Description** Label is **Object Name**. Name of the object. Maximum size is 80 characters. When the object is created using an API `update()` call, and the Name field is null, Salesforce sets the value to the record ID. When the object is created using an API `create()` call, Salesforce sets the initial value to the record ID. You can't set the Name field to null.
`RecordTypeId`	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the record type assigned to this object. Create at least one record type before this field appears for custom or standard objects.
`SystemModStamp`	**Type** dateTime **Properties** Aggregatable, Defaulted on create, Filter, Sort

Field	Details
	Description Date and time when a user or automated process (such as a trigger) last modified this record. In this context, "trigger" refers to Salesforce code that runs to implement standard functionality, and not an Apex trigger.
`OwnerId`	**Type** reference **Properties** Aggregatable, Create, Defaulted on create, Filter, Group, Namepointing, Sort, Update **Description** The ID of the user who currently owns this object. Default value is the user logged in to the API to perform the `create()` call.

SEE ALSO:

System Fields

Field Types

API Field Properties

*`Custom Object`*__Feed

Represents the feed, specifically posts and feed-tracked changes, on a custom object.

A custom object feed shows posts and changes to the object's tracked fields. The object name is variable and uses *`Custom Object`*__Feed syntax, where *`Custom Object`* is the name of the custom object. For example, `Textile__Feed` represents a feed on the custom object `Textile__c`.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

In the internal org, users can delete all feed items they created. This rule varies in Experience Cloud sites where threaded discussions and delete-blocking are enabled. Site members can delete all feed items they created, provided the feed items don't have content nested under them—like a comment, answer, or reply. Where the feed item has nested content, only feed moderators and users with the Modify All Data permission can delete threads.

To delete feed items they didn't create, users must have one of these permissions:

- Modify All Data
- Modify All on the parent object, like Textile__c.
- Moderate Chatter

> **Note:** Users with the Moderate Chatter permission can delete only the feed items and comments they can see.

Only users with this permission can delete items in unlisted groups.

Fields

Field	Details
`BestCommentId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the comment marked as best answer on a question post. This field is available in API version 44.0 and later.
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The body of the post. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of comments associated with this feed item. Tip: In a feed that supports pre-moderation, `CommentCount` isn't updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed, comments aren't counted until approved by an admin or someone with Can Approve Feed Post and Comment or Modify All Data. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until the end of comments is returned.
`ConnectionId`	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description When a PartnerNetworkConnection modifies a record that is tracked, the `CreatedBy` field contains the ID of the system administrator. The `ConnectionId` contains the ID of the PartnerNetworkConnection. Available if Salesforce to Salesforce is enabled for your org.
`ContentData`	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
`ContentDescription`	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in `ContentData`.
`ContentFileName`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. This field is required if `Type` is `ContentPost`.The name of the file uploaded to the feed. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.
`ContentSize`	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
`ContentType`	**Type** string

Field	Details
	Properties Group, Nillable, SortGroup **Description** Available in API version 36.0 and earlier only. The MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
`FeedPostId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** This field was removed in API version 22.0, and is available in earlier versions for backward compatibility only. ID of the associated FeedPost. A FeedPost represents the following types of changes in a feed item: changes to tracked fields, text posts, link posts, and content posts.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this item to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the context user.
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. If you post a rich text feed comment using SOAP API, set `IsRichText` to `true` and escape HTML entities from the body. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<a>` • `<b>` • `<code>` • `<i>`

Field	Details
	• <u> • <s> • • • • <img> The <img> tag is accessible only through the API and must reference files in Salesforce similar to this example: <img src="sfdc://069B0000000omjh"></img> Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of likes associated with this feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a LinkPost.
NetworkScope	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default Experience Cloud site, a specific Experience Cloud site, or all sites. This field is available in API version 26.0 and later, if digital experiences is enabled for your org. NetworkScope can have the following values: • NetworkId—The ID of the Experience Cloud site in which the FeedItem is available. If left empty, the feed item is only available in the default Experience Cloud site. • AllNetworks—The feed item is available in all Experience Cloud sites. Note the following exceptions for NetworkScope:

Field	Details
	• Only feed items with a Group or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`. • You can't filter a feed item on the `NetworkScope` field.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the custom object record that is tracked in the feed. The feed is displayed on the detail page for this record.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a `ContentPost`. This field is null for all posts except `ContentPost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the `LinkUrl` is the URL and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item: • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging).

Field	Details
	For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in WDC. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `CaseCommentPost`—generated event when a user adds a case comment for a case object • `EmailMessageEvent`—generated event when an email related to a case object is sent or received • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `ChangeStatusPost`—generated event when a user changes the status of a case • `AttachArticleEvent`—generated event when a user attaches an article to a case Note: If you set `Type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.

Field	Details
`Visibility`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available to all users or internal users only. This field is available in API version 26.0 and later, if digital experiences is enabled for your org. `Visibility` can have the following values: • `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`: • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • On user and group posts, only internal users can set `Visibility` to `InternalUsers`.

Usage

A feed for a custom object is automatically created when a user enables feed tracking for the custom object. Use feeds to track changes to the custom objects they serve. For example, `Textile__Feed` tracks changes to a `Textile__c` object. Use feed objects to retrieve the content of feed fields, such as type of feed or feed ID.

Note the following SOQL restrictions. No SOQL limit if logged-in user has View All Data permission. If not, specify a `LIMIT` clause of 1,000 records or fewer. SOQL `ORDER BY` on fields using relationships is not available. Use `ORDER BY` on fields on the root object in the SOQL query.

What About *`StandardObjectName`*Feed Objects?

Similar to custom objects, standard objects can have associated feed objects. For a list of *`StandardObjectName`*Feed objects, see StandardObjectNameFeed.

CHAPTER 10 Associated Objects (Feed, History, OwnerSharingRule, and Share Objects)

This section provides a list of objects associated to standard objects and their standard fields.

Some fields may not be listed for some objects. To see the system fields for each object, see System Fields.

To verify the complete list of fields for an object, use a describe call from the API or inspect with an appropriate tool. For example, inspect the WSDL or use a schema viewer.

*StandardObjectName*Feed

*StandardObjectName*Feed is the model for all feed objects associated with standard objects. These objects represent the posts and feed-tracked changes of a standard object.

The object name is variable and uses *StandardObjectName*Feed syntax. For example, AccountFeed represents the posts and feed-tracked changes on an account record. We list the available associated feed objects at the end of this topic. For specific version information, see the documentation for the standard object.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

In the internal org, users can delete all feed items they created. This rule varies in Experience Cloud sites where threaded discussions and delete-blocking are enabled. Site members can delete all feed items they created, provided the feed items don't have content nested under them—like a comment, answer, or reply. Where the feed item has nested content, only feed moderators and users with the Modify All Data permission can delete threads.

To delete feed items they didn't create, users must have one of these permissions:

- Modify All Data
- Modify All on the parent object, like Account for AccountFeed
- Moderate Chatter

  Note: Users with the Moderate Chatter permission can delete only the feed items and comments they can see.

  Only users with this permission can delete items in unlisted groups.

For more special access rules, if any, see the documentation for the standard object. For example, for AccountFeed, see the special access rules for Account.

Fields

Field	Details
`BestCommentId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the comment marked as best answer on a question post. This field is available in API version 44.0 and later.
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The body of the post. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of comments associated with this feed item. Tip: In a feed that supports pre-moderation, `CommentCount` isn't updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed,

Field	Details
	comments aren't counted until approved by an admin or someone with Can Approve Feed Post and Comment or Modify All Data. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until the end of comments is returned.
`ConnectionId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** When a PartnerNetworkConnection modifies a record that is tracked, the `CreatedBy` field contains the ID of the system administrator. The `ConnectionId` contains the ID of the PartnerNetworkConnection. Available if Salesforce to Salesforce is enabled for your organization.
`ContentData`	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
`ContentDescription`	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in `ContentData`.
`ContentFileName`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. This field is required if `Type` is `ContentPost`.The name of the file uploaded to the feed. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.

Field	Details
`ContentSize`	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
`ContentType`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
`FeedPostId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** This field was removed in API version 22.0, and is available in earlier versions for backward compatibility only. ID of the associated FeedPost. A FeedPost represents the following types of changes in a feed item: changes to tracked fields, text posts, link posts, and content posts.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this item to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the context user.
`isRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field	Details
	Description Indicates whether the feed item Body contains rich text. If you post a rich text feed comment using SOAP API, set IsRichText to true and escape HTML entities from the body. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • <p> Tip: Though the tag isn't supported, you can use <p> </p> to create lines. • <a> • <b> • <code> • <i> • <u> • <s> • • • • <img> The <img> tag is accessible only through the API and must reference files in Salesforce similar to this example: <img src="sfdc://069B0000000omjh"></img> Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of likes associated with this feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a LinkPost.

Field	Details
NetworkScope	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default Experience Cloud site, a specific Experience Cloud site, or all sites. This field is available in API version 26.0 and later, if digital experiences is enabled for your org. `NetworkScope` can have the following values: • `NetworkId`—The ID of the Experience Cloud site in which the FeedItem is available. If left empty, the feed item is only available in the default Experience Cloud site. • `AllNetworks`—The feed item is available in all Experience Cloud sites. Note the following exceptions for `NetworkScope`: • Only feed items with a Group or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`. • You can't filter a feed item on the `NetworkScope` field.
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the record that is tracked in the feed. The detail page for the record displays the feed.
RelatedRecordId	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion record associated with a `ContentPost`. This field is null for all posts except `ContentPost`.
Title	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the `LinkUrl` is the URL and this field is the link name.

Field	Details
Type	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item: • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in WDC. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `CaseCommentPost`—generated event when a user adds a case comment for a case object

Field	Details
	• `EmailMessageEvent`—generated event when an email related to a case object is sent or received • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `ChangeStatusPost`—generated event when a user changes the status of a case • `AttachArticleEvent`—generated event when a user attaches an article to a case Note: If you set `Type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.
`Visibility`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available to all users or internal users only. This field is available in API version 26.0 and later, if digitial experiences is enabled for your organization. `Visibility` can have the following values: • `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`: • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • On user and group posts, only internal users can set `Visibility` to `InternalUsers`.

Usage

A feed for an object is automatically created when a user enables feed tracking for the object. Use feeds to track changes to records. For example, `AccountFeed` tracks changes to an account record. Use feed objects to retrieve the content of feed fields, such as type of feed or feed ID.

- `NewsFeed` and `UserProfileFeed` are available in API version 18.0 through API version 26.0. In API version 27.0 and later, `NewsFeed` and `UserProfileFeed` are no longer available in SOAP API. Use Connect REST API to access `NewsFeed` and `UserProfileFeed`.

  Use the `NewsFeed` object to query and retrieve lead feed items associated with a converted lead record.

- For `NewsFeed` and `UserProfileFeed`, users who do not have the View All Data permission have the following limitations when querying records: Must specify a `LIMIT` clause and the limit must be less than or equal to 1000. Can include a `WHERE` clause that references object fields, but can't include references to fields in related objects. For example, you can filter by `CreatedDate` or `ParentId`, but not by `Parent.Name`. Can include an `ORDER BY` clause that references object fields, but can't include references to fields in related objects. For example, `ORDER BY CreatedDate` or `ParentId`, but not by `Parent.Name`. To query for the most recent feed items, `ORDER BY CreatedDate DESC, Id DESC`.

Note the following SOQL restrictions. No SOQL limit if logged-in user has View All Data permission. If not, specify a `LIMIT` clause of 1,000 records or fewer. SOQL `ORDER BY` on fields using relationships is not available. Use `ORDER BY` on fields on the root object in the SOQL query.

- The name *`Article Type`*__Feed is variable, where *Article Type* is the object name for the article type associated with the article. For example, `Offer__Feed` represents a feed on an article of type *Offer*.
- Field Service must be enabled in your organization for `ServiceAppointmentFeed`, `ServiceCrewFeed`, `ServiceMemberFeed`, `ServiceResourceCapacityFeed`, `ServiceResourceFeed`, `ServiceResourceSkillFeed`, `ServiceTerritoryFeed`, `ServiceTerritoryMemberFeed`, and `SkillRequirementFeed`.
- For `WorkOrderFeed`, Work Orders or Field Service must be enabled in your organization.
- On `UserFeed`, if you use the `FeedComment` object to comment on a user record, the user can delete the comment. For example, if John Smith adds a comment to the feed on Sasha Jones' user record, Sasha can delete the comment.

Objects That Follow This Model

These objects follow the standard pattern for associated feed objects.

- AccountFeed
- AccountRelationshipFeed
- ActiveScratchOrgFeed
- AssetFeed
- AssetDowntimePeriodFeed
- AssetRelationshipFeed
- AssignedResourceFeed
- CampaignFeed
- CaseFeed
- ChannelProgramFeed
- ChannelProgramLevelFeed
- ChannelProgramMemberFeed
- CollaborationGroupFeed
- CommSubscriptionChannelTypeFeed
- CommSubscriptionConsentFeed
- CommSubscriptionFeed
- CommSubscriptionTimingFeed
- ConsumptionScheduleFeed
- ContactFeed
- ContentDocumentFeed
- ContractFeed
- CredentialStuffingEventStoreFeed
- DashboardComponentFeed

- DashboardFeed
- EngagementChannelTypeFeed
- EnhancedLetterheadFeed
- EntitlementFeed
- EntityMilestoneFeed
- EventFeed
- ExternalAccountHierarchyFeed
- FulfillmentOrderFeed
- GoalFeed
- JobProfileFeed
- LandingPageFeed
- LeadFeed
- LinkedArticleFeed
- LiveChatTranscriptFeed
- LocationFeed
- LocationGroupFeed
- MaintenanceAssetFeed
- MaintenancePlanFeed
- MaintenanceWorkRuleFeed
- MarketingFormFeed
- MarketingLinkFeed
- MessagingSessionFeed
- MetricFeed
- NamespaceRegistryFeed
- OperatingHoursFeed
- OpportunityFeed
- OrderFeed
- OrderItemFeed
- OrderSummaryFeed
- PartnerFundAllocationFeed
- PartnerFundClaimFeed
- PartnerFundRequestFeed
- PartnerMarketingBudgetFeed
- PartyConsentFeed
- Product2Feed
- ProductConsumedFeed
- ProductItemFeed
- ProductItemTransactionFeed
- ProductRequestFeed
- ProductRequestLineItemFeed

- ProductRequiredFeed
- ProductServiceCampaignFeed
- ProductServiceCampaignItemFeed
- ProductTransferFeed
- ProfileSkillEndorsementFeed
- ProfileSkillFeed
- ProfileSkillUserFeed
- QuoteFeed
- RecordsetFilterCriteriaFeed
- RecordsetFilterCriteriaRuleFeed
- ReportAnomalyEventStoreFeed
- ReportFeed
- ResourceAbsenceFeed
- ResourcePreferenceFeed
- ReturnOrderFeed
- ReturnOrderLineItemFeed
- ScratchOrgInfoFeed
- ServiceAppointmentCapacityUsageFeed
- ServiceAppointmentFeed
- ServiceContractFeed
- ServiceCrewFeed
- ServiceCrewMemberFeed
- ServiceResourceCapacityFeed
- ServiceResourceFeed
- ServiceResourceSkillFeed
- ServiceTerritoryFeed
- ServiceTerritoryLocationFeed
- ServiceTerritoryMemberFeed
- ServiceTerritoryWorkTypeFeed
- SessionHijackingEventStoreFeed
- ShiftFeed
- ShipmentFeed
- ShipmentItemFeed
- SignupRequestFeed
- SiteFeed
- SkillRequirementFeed
- SnippetFeed
- SocialPostFeed
- SolutionFeed
- SOSSessionFeed

- SurveyFeed
- TaskFeed
- Territory2ModelFeed
- ThreatDetectionFeedbackFeed
- TimeSheetEntryFeed
- TimeSheetFeed
- TopicFeed
- UserFeed
- UserProfileFeed
- VoiceCallFeed
- WebStorePricebookFeed
- WorkBadgeDefinitionFeed
- WorkCapacityLimitFeed
- WorkCapacityUsageFeed
- WorkCoachingFeed
- WorkFeedbackRequestFeed
- WorkGoalFeed
- WorkOrderFeed
- WorkOrderLineItemFeed
- WorkPerformanceCycleFeed
- WorkRewardFundFeed
- WorkRewardFundTypeFeed
- WorkTypeFeed
- WorkTypeGroupFeed
- WorkTypeGroupMemberFeed

Objects That Don't Follow This Model

Custom object feed objects and *Article Type*__Feed (API 20.0) use a different naming syntax, but they have the same supported calls and fields.

*StandardObjectName*History

*StandardObjectName*History is the model for all history objects associated with standard objects. These objects represent the history of changes to the values in the fields of a standard object.

The object name is variable and uses *StandardObjectName*History syntax. For example, AccountHistory represents the history of changes to the values of an account record's fields. We list the available associated history objects at the end of this topic. For specific version information, see the documentation for the standard object.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

You can also enable `delete()` in API version 42.0 and later. See Enable delete of Field History and Field History Archive.

Special Access Rules

For specific special access rules, if any, see the documentation for the standard object. For example, for AccountHistory, see the special access rules for Account.

Fields

Field Name	Details
StandardObjectNameId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the standard object.
DataType	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Data type of the field that was changed.
Field	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Name of the field that was changed.
NewValue	**Type** anyType **Properties** Nillable, Sort **Description** New value of the field that was changed.
OldValue	**Type** anyType **Properties** Nillable, Sort

Field Name	Details
	Description Old value of the field that was changed.

Objects That Follow This Model

These objects follow the standard pattern for associated history objects.

- AccountHistory
- AccountRelationshipHistory
- ActiveScratchOrgHistory
- AssetHistory
- AssetDowntimePeriodHistory
- AssetRelationshipHistory
- AssociatedLocationHistory
- AuthorizationFormConsentHistory
- AuthorizationFormDataUseHistory
- AuthorizationFormHistory
- AuthorizationFormTextHistory
- CampaignHistory
- CaseHistory
- ChannelProgramHistory
- ChannelProgramLevelHistory
- ChannelProgramMemberHistory
- CommSubscriptionChannelTypeHistory
- CommSubscriptionConsentHistory
- CommSubscriptionHistory
- CommSubscriptionTimingHistory
- ContactHistory
- ContactPointConsentHistory
- ContactPointEmailHistory
- ContactPointPhoneHistory
- ContactPointTypeConsentHistory
- ContentDocumentHistory
- ContentVersionHistory
- ContractHistory
- ContractLineItemHistory
- ContactPointConsentHistory
- CrisisHistory
- DataUseLegalBasisHistory

- DataUsePurposeHistory
- EmployeeHistory
- EmployeeCrisisAssessmentHistory
- EntitlementHistory
- EntityMilestoneHistory
- GoalHistory
- IndividualHistory
- InternalOrganizationUnitHistory
- JobProfileHistory
- LeadHistory
- LinkedArticleHistory
- LiveAgentSessionHistory
- LiveChatTranscriptHistory
- LocationHistory
- LocationGroupHistory
- MacroHistory
- MaintenanceAssetHistory
- MaintenancePlanHistory
- MaintenanceWorkRuleHistory
- MessagingEndUserHistory
- MessagingSessionHistory
- MetricDataLinkHistory
- MetricHistory
- NamespaceRegistryHistory
- OrderHistory
- OrderItemHistory
- PartnerFundAllocationHistory
- PartnerFundClaimHistory
- PartnerFundRequestHistory
- PartnerMarketingBudgetHistory
- PartyConsentHistory
- Pricebook2History
- PricebookEntryHistory
- Product2History
- ProductConsumedHistory
- ProductItemHistory
- ProductItemTransactionHistory
- ProductRequestHistory
- ProductRequestLineItemHistory
- ProductRequiredHistory

- ProductServiceCampaignHistory
- ProductServiceCampaignItemHistory
- ProductTransferHistory
- ProfileSkillEndorsementHistory
- ProfileSkillHistory
- ProfileSkillUserHistory
- QuickTextHistory
- RecordsetFilterCriteriaHistory
- RecordsetFilterCriteriaRuleHistory
- ResourceAbsenceHistory
- ResourcePreferenceHistory
- ReturnOrderHistory
- ReturnOrderLineItemHistory
- SOSSessionHistory
- ScratchOrgInfoHistory
- ServiceAppointmentCapacityUsageHistory
- ServiceAppointmentHistory
- ServiceContractHistory
- ServiceCrewHistory
- ServiceCrewMemberHistory
- ServiceReportHistory
- ServiceResourceCapacityHistory
- ServiceResourceHistory
- ServiceResourceSkillHistory
- ServiceTerritoryHistory
- ServiceTerritoryLocationHistory
- ServiceTerritoryMemberHistory
- ServiceTerritoryWorkTypeHistory
- ShiftHistory
- ShipmentHistory
- ShipmentItemHistory
- SignupRequestHistory
- SiteHistory
- SkillRequirementHistory
- SocialPersonaHistory
- SocialPostHistory
- SolutionHistory
- Territory2ModelHistory
- TimeSheetEntryHistory
- TimeSheetHistory

- WorkBadgeDefinitionHistory
- WorkCapacityLimitHistory
- WorkCapacityUsageHistory
- WorkCoachingHistory
- WorkFeedbackHistory
- WorkFeedbackQuestionHistory
- WorkFeedbackQuestionSetHistory
- WorkFeedbackRequestHistory
- WorkGoalCollaboratorHistory
- WorkGoalHistory
- WorkOrderHistory
- WorkOrderLineItemHistory
- WorkPerformanceCycleHistory
- WorkRewardFundHistory
- WorkRewardFundTypeHistory
- WorkRewardHistory
- WorkTypeGroupHistory
- WorkTypeGroupMemberHistory
- WorkTypeHistory

Objects That Don't Follow This Model

These objects *don't* follow the standard pattern for associated history objects. They are documented separately.

- KnowledgeArticleVersionHistory
- OpportunityHistory
- ProcessInstanceHistory
- RecordActionHistory
- WebCartHistory

`StandardObjectName`OwnerSharingRule

`StandardObjectName`OwnerSharingRule is the model for all owner sharing rule objects associated with standard objects. These objects represent a rule for sharing a standard object with users other than the owner.

The object name is variable and uses `StandardObjectName`OwnerSharingRule syntax. For example, ChannelProgramOwnerSharingRule is a rule for sharing a channel program with users other than the channel program owner. We list the available associated owner sharing rule objects at the end of this topic. For specific version information, see the standard object documentation.

Note: To enable access to this object for your org, contact Salesforce customer support. However, we recommend that you instead use Metadata API to programmatically update owner sharing rules because it triggers automatic sharing rule recalculation. The SharingRules Metadata API type is enabled for all orgs.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

For specific special access rules, if any, see the documentation for the standard object. For example, for ChannelProgramOwnerSharingRule, see the special access rules for ChannelProgram.

Fields

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Determines the level of access users have to records. Values are: • `Read` (read only) • `Edit` (read/write)
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the sharing rule. Maximum length is 1000 characters.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is

Field Name	Details
	specified, performance may slow while Salesforce generates one for each record.
GroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the source group. Records that are owned by users in the source group trigger the rule to give access.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Label of the sharing rule as it appears in the UI. Maximum length is 80 characters.
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group that you are granting access to.

Objects That Follow This Model

These objects follow the standard pattern for associated owner sharing rule objects.

- AccountBrandOwnerSharingRule
- AccountRelationshipOwnerSharingRule
- ActiveScratchOrgOwnerSharingRule
- AgentWorkOwnerSharingRule
- AuthorizationFormConsentOwnerSharingRule
- AuthorizationFormDataUseOwnerSharingRule
- AuthorizationFormOwnerSharingRule
- ChannelProgramLevelOwnerSharingRule
- ChannelProgramMemberOwnerSharingRule
- ChannelProgramOwnerSharingRule
- CommerceEntitlementPolicyOwnerSharingRule
- CommSubscriptionChannelTypeOwnerSharingRule

- CommSubscriptionConsentOwnerSharingRule
- CommSubscriptionOwnerSharingRule
- ContactPointConsentOwnerSharingRule
- ContactPointEmailOwnerSharingRule
- ContactPointPhoneOwnerSharingRule
- ContactPointTypeConsentOwnerSharingRule
- ContactRequestOwnerSharingRule
- CrisisOwnerSharingRule
- DataUseLegalBasisOwnerSharingRule
- DataUsePurposeOwnerSharingRule
- ElectronicMediaGroupOwnerSharingRule
- EmployeeOwnerSharingRule
- EmployeeCrisisAssessmentOwnerSharingRule
- EngagementChannelTypeOwnerSharingRule
- ExternalAccountHierarchyOwnerSharingRule
- FlowInterviewOwnerSharingRule
- FulfillmentOrderOwnerSharingRule
- GoalOwnerSharingRule
- InternalOrganizationUnitOwnerSharingRule
- JobProfileOwnerSharingRule
- ListEmailOwnerSharingRule
- LiveAgentSessionOwnerSharingRule
- LiveChatTranscriptOwnerSharingRule
- LocationOwnerSharingRule
- LocationGroupOwnerSharingRule
- MacroOwnerSharingRule
- MacroUsageOwnerSharingRule
- MaintenancePlanOwnerSharingRule
- MaintenanceWorkRuleOwnerSharingRule
- MessagingEndUserOwnerSharingRule
- MessagingSessionOwnerSharingRule
- MetricOwnerSharingRule
- OrderSummaryOwnerSharingRule
- OrderSummaryRoutingScheduleOwnerSharingRule
- OrgDeleteRequestOwnerSharingRule
- PartnerFundAllocationOwnerSharingRule
- PartnerFundClaimOwnerSharingRule
- PartnerFundRequestOwnerSharingRule
- PartnerMarketingBudgetOwnerSharingRule
- PartyConsentOwnerSharingRule

- PendingServiceRoutingOwnerSharingRule
- ProductMediaOwnerSharingRule
- PersonListOwnerSharingRule
- ProductItemOwnerSharingRule
- ProductRequestOwnerSharingRule
- ProductServiceCampaignOwnerSharingRule
- ProductServiceCampaignItemOwnerSharingRule
- ProductTransferOwnerSharingRule
- ProfileSkillOwnerSharingRule
- PromptActionOwnerSharingRule
- QuickTextOwnerSharingRule
- QuickTextUsageOwnerSharingRule
- QuoteOwnerSharingRule
- RecordsetFilterCriteriaOwnerSharingRule
- ReturnOrderOwnerSharingRule
- SOSSessionOwnerSharingRule
- ScratchOrgInfoOwnerSharingRule
- ServiceAppointmentOwnerSharingRule
- ServiceContractOwnerSharingRule
- ServiceCrewOwnerSharingRule
- ServiceResourceOwnerSharingRule
- ServiceTerritoryOwnerSharingRule
- ShiftOwnerSharingRule
- ShipmentOwnerSharingRule
- SignupRequestOwnerSharingRule
- SocialPostOwnerSharingRule
- SurveyInvitationOwnerSharingRule
- SurveyOwnerSharingRule
- TimeSheetOwnerSharingRule
- UserAppMenuCustomizationOwnerSharingRule
- UserProvisioningRequestOwnerSharingRule
- UserServicePresenceOwnerSharingRule
- VoiceCallListOwnerSharingRule
- VoiceCallOwnerSharingRule
- VoiceCallQualityFeedbackOwnerSharingRule
- VoiceCallRecordingOwnerSharingRule
- VoiceCoachingOwnerSharingRule
- VoiceMailContentOwnerSharingRule
- VoiceMailGreetingOwnerSharingRule
- VoiceMailMessageOwnerSharingRule

- VoiceUserLineOwnerSharingRule
- VoiceUserPreferencesOwnerSharingRule
- VoiceVendorLineOwnerSharingRule
- WebCartOwnerSharingRule
- WishListOwnerSharingRule
- WorkAccessOwnerSharingRule
- WorkBadgeDefinitionOwnerSharingRule
- WorkCapacityLimitOwnerSharingRule
- WorkCoachingOwnerSharingRule
- WorkFeedbackOwnerSharingRule
- WorkFeedbackQuestionOwnerSharingRule
- WorkFeedbackQuestionSetOwnerSharingRule
- WorkFeedbackRequestOwnerSharingRule
- WorkGoalOwnerSharingRule
- WorkOrderOwnerSharingRule
- WorkPerformanceCycleOwnerSharingRule
- WorkRewardFundOwnerSharingRule
- WorkRewardFundTypeOwnerSharingRule
- WorkRewardOwnerSharingRule
- WorkThanksOwnerSharingRule
- WorkTypeGroupOwnerSharingRule
- WorkTypeOwnerSharingRule

Objects That Don’t Follow This Model

These objects *don’t* follow the standard pattern for associated owner sharing rule objects. They are documented separately.

- AccountOwnerSharingRule
- AssetOwnerSharingRule
- CampaignOwnerSharingRule
- CaseOwnerSharingRule
- ContactOwnerSharingRule
- LeadOwnerSharingRule
- OpportunityOwnerSharingRule
- OrderOwnerSharingRule

*StandardObjectName*Share

*StandardObjectName*Share is the model for all share objects associated with standard objects. These objects represent a sharing entry on the standard object.

The object name is variable and uses *StandardObjectName*Share syntax. For example, AccountBrandShare is a sharing entry on an account brand. We list the available associated share objects at the end of this topic. For specific version information, see the standard object documentation.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

For specific special access rules, if any, see the documentation for the standard object. For example, for AccountBrandShare, see the special access rules for AccountBrand.

Fields

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The level of access allowed. Values are: • `All` (owner) • `Edit` (read/write) • `Read` (read only)
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the parent record.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that the sharing entry exists.
`UserOrGroupId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** ID of the user or group that has been given access to the object.

Objects That Follow This Model

These objects follow the standard pattern for associated history objects.

- AccountBrandShare
- AccountRelationshipShare
- ActiveScratchOrgShare
- AgentWorkShare
- AuthorizationFormConsentShare
- AuthorizationFormDataUseShare
- AuthorizationFormShare
- ChannelProgramLevelShare
- ChannelProgramMemberShare
- ChannelProgramShare
- CommSubscriptionChannelTypeShare
- CommSubscriptionConsentShare
- CommSubscriptionShare
- ContactPointConsentShare
- ContactPointEmailShare
- ContactPointPhoneShare
- ContactPointTypeConsentShare
- ContactRequestShare
- CrisisShare
- DataUseLegalBasisShare
- DataUsePurposeShare
- ElectronicMediaGroupShare
- EmployeeShare
- EmployeeCrisisAssessmentShare
- EngagementChannelTypeShare
- FlowInterviewShare
- FulfillmentOrderShare
- GoalShare
- InternalOrganizationUnitShare
- JobProfileShare

- ListEmailShare
- LiveAgentSessionShare
- LiveChatTranscriptShare
- LocationShare
- LocationGroupShare
- MacroShare
- MacroUsageShare
- MaintenancePlanShare
- MaintenanceWorkRuleShare
- MessagingEndUserShare
- MessagingSessionShare
- MetricShare
- OrderSummaryShare
- OrderSummaryRoutingScheduleShare
- OrgDeleteRequestShare
- PartnerFundAllocationShare
- PartnerFundClaimShare
- PartnerFundRequestShare
- PartnerMarketingBudgetShare
- PartyConsentShare
- PendingServiceRoutingShare
- PersonListShare
- ProductItemShare
- ProductMedia
- ProductRequestShare
- ProductServiceCampaignShare
- ProductServiceCampaignItemShare
- ProductTransferShare
- ProfileSkillShare
- PromptActionShare
- QuickTextShare
- QuickTextUsageShare
- QuoteShare
- RecordsetFilterCriteriaShare
- ReturnOrderShare
- SOSSessionShare
- ScratchOrgInfoShare
- ServiceAppointmentShare
- ServiceContractShare
- ServiceCrewShare

- ServiceResourceShare
- ServiceTerritoryShare
- ShiftShare
- ShipmentShare
- SignupRequestShare
- SocialPostShare
- SurveyShare
- Survey
- SurveyEngagementContextShare
- SurveyInvitationShare
- TimeSheetShare
- UserAppMenuCustomizationShare
- UserEmailPreferredPersonShare
- UserProvisioningRequestShare
- UserServicePresenceShare
- VoiceCallListShare
- VoiceCallQualityFeedbackShare
- VoiceCallRecordingShare
- VoiceCallShare
- VoiceCoachingShare
- VoiceMailContentShare
- VoiceMailGreetingShare
- VoiceMailMessageShare
- VoiceUserLineShare
- VoiceUserPreferencesShare
- VoiceVendorLineShare
- WebCartShare
- WishlistShare
- WorkAccessShare
- WorkBadgeDefinitionShare
- WorkCapacityLimitShare
- WorkCoachingShare
- WorkFeedbackQuestionSetShare
- WorkFeedbackQuestionShare
- WorkFeedbackRequestShare
- WorkFeedbackShare
- WorkGoalShare
- WorkOrderShare
- WorkPerformanceCycleShare
- WorkRewardFundShare

- WorkRewardFundTypeShare
- WorkRewardShare
- WorkThanksShare
- WorkTypeGroupShare
- WorkTypeShare

Objects That Don't Follow This Model

These objects *don't* follow the standard pattern for associated history objects. They are documented separately.

- AccountShare
- AssetShare
- CampaignShare
- CaseShare
- ContactShare
- IndividualShare
- LeadShare
- OpportunityShare
- UserShare

CHAPTER 11 Core Calls

The following table lists supported calls in the API in alphabetical order, and provides a brief description for each. Click a call name to see syntax, usage, and more information for that call.

Note: For a list of API utility calls, see Utility Calls, and for a list of describe calls, see Describe Calls.

Call	Description
`convertLead()`	Converts a Lead into an Account, Contact, or (optionally) an Opportunity.
`create()`	Adds one or more new individual objects to your organization's data.
`delete()`	Deletes one or more individual objects from your organization's data.
`deleteByExample()`	Deletes objects from your organization's data using an sObject as a template for what to delete. All data in a big object matching the values in the sObject templates are deleted.
`emptyRecycleBin()`	Delete records from the recycle bin immediately.
`executeListView()`	Executes a list view's SOQL query to retrieve data, labels, and actions from a list view.
`findDuplicates()`	Performs rule-based searches for duplicate records. The input is an array of sObject, each of which specifies the values to search for and the type of object that supplies the duplicate rules. The output identifies the detected duplicates for each object that supplies the duplicate rules. `findDuplicates()` applies the rules to the values to do the search. The output identifies the detected duplicates for each sObject.
`findDuplicatesByIds()`	Performs rule-based searches for duplicate records. The input is an array of IDs, each of which specifies the records for which to search for duplicates. The output identifies the detected duplicates for each object that supplies the duplicate rules. `findDuplicatesByIds()` applies the rules to the record IDs to do the search. The output identifies the detected duplicates for each ID.
`getDeleted()`	Retrieves the IDs of individual objects of the specified object that have been deleted since the specified time. For information on IDs, see ID Field Type.
`getUpdated()`	Retrieves the IDs of individual objects of the specified object that have been updated since the specified time. For information on IDs, see ID Field Type.
`invalidateSessions()`	Ends one or more sessions specified by `sessionId`.
`login()`	Logs in to the login server and starts a client session.

Call	Description
logout()	Ends the session of the logged-in user.
merge()	Merges records of the same object type.
performQuickActions()	Executes quick actions of type create or update.
process()	Submits an array of approval process instances for approval, or processes an array of approval process instances to be approved, rejected, or removed.
query()	Executes a query against the specified object and returns data that matches the specified criteria.
queryAll()	Same as query(), but includes deleted and archived items.
queryMore()	Retrieves the next batch of objects from a query.
retrieve()	Retrieves one or more objects based on the specified object IDs.
search()	Executes a text search in your organization's data.
undelete()	Undelete records identified with queryAll().
update()	Updates one or more existing objects in your organization's data.
upsert()	Creates new objects and updates existing objects; matches on a custom field to determine the presence of existing objects.

Samples

The samples in this section are based on the enterprise WSDL file. They assume that you have already imported the WSDL file and created a connection. To learn how to do so, see the Quick Start tutorial.

convertLead()

Converts a Lead into an Account, Contact, or (optionally) an Opportunity.

Syntax

```
LeadConvertResult[] = connection.convertLead(leadConverts LeadConvert[]);
```

Usage

Use convertLead() to convert a Lead into an Account and Contact, and (optionally) an Opportunity. If appropriate for your business, you can also use convertLead() to convert a lead to an account and a person account instead of a contact. To convert a Lead, your client application must be logged in with the "Convert Leads" permission and the "Edit" permission on leads, as well as "Create" and "Edit" on the Account, Contact, and Opportunity objects.

This call provides an easy way to convert the information in a qualified lead to a new or updated account, contact, and opportunity. Your organization can set its own guidelines for determining when a lead is qualified. Typically, a lead can be converted when it becomes a real opportunity that you want to forecast.

If data is merged into existing account, contact, and opportunity objects, then only empty fields in the target object are overwritten—existing data (including IDs) aren't overwritten. The only exception is if your client application sets `overwriteLeadSource` to `true`. In this case, the `LeadSource` field in the target Contact object will be overwritten with the contents of the `LeadSource` field in the source Lead object.

When converting leads, consider the following rules and guidelines:

Field Mappings

The system automatically maps standard lead fields to standard account, contact, and opportunity fields. For custom lead fields, your Salesforce administrator can specify how they map to custom account, contact, and opportunity fields.

Record Types

If the organization uses record types, the default record type of the new owner is assigned to records created during lead conversion. For more information about record types, see Salesforce Help .

Picklist Values

The system assigns the default picklist values for the account, contact, and opportunity when mapping any standard lead picklist fields that are blank. If your organization uses record types, blank values are replaced with the default picklist values of the new record owner.

String Values

Starting with API version 15.0, if you specify a value for a field that contains a string, and the value is too big for the field, the call fails and an error is returned. In previous versions of the API the value was truncated and the call succeeded. If you wish to keep the old behavior with versions 15.0 and later, use the AllowFieldTruncationHeader SOAP header.

Errors

If any of the leads fail to convert as part of a bulk operation, the lead conversion is retried for each lead individually.

Automatic Subscriptions for Chatter Feeds

When you convert a lead into a new account, contact, and opportunity, the lead owner is unsubscribed from the lead record's Chatter feed. The lead owner, the owner of the generated records, and users that were subscribed to the lead aren't automatically subscribed to the generated records, unless they have automatic subscriptions enabled in their Chatter feed settings. They must have automatic subscriptions enabled to see changes to the account, contact, and opportunity records in their news feed.

A user can subscribe to a record or to another user. Changes to the record and updates from the users are displayed in the Chatter feed on the user's home page, which is a useful way to stay up-to-date with other users and with changes made to records in Salesforce. Feeds are available in API version 18.0 and later.

Basic Steps for Converting Leads

Converting leads involves the following basic steps:

1. The client application determines the IDs of any lead(s) to be converted.
2. Optionally, the client application determines the IDs of any account(s) to merge the lead into. The client application can use SOSL or SOQL to search for accounts that match the lead name, as in the following example:

```
select id, name from account where name='CompanyNameOfLeadBeingMerged'
```

3. Optionally, the client application determines the IDs of contact(s) to merge the lead into. The client application can use SOSL or SOQL to search for contacts that match the lead contact name, as in the following example:

```
select id, name from contact where firstName='FirstName' and lastName='LastName' and
accountId = '001...'
```

4. Optionally, the client application determines whether opportunities should be created from the lead, or the ID of an opportunity to merge the lead into. The client application can use SOSL or SOQL to search for contacts that match the lead contact name, as in the following example:

```
select id, name from opportunity where name='OpportunityNameOfOpportunityBeingMerged'
```

5. The client application queries the LeadStatus table to obtain the possible converted status options (

```
SELECT Id, MasterLabel FROM LeadStatus WHERE IsConverted=true
```

), and then selects a value for the Converted Status.

6. The client application calls `convertLead()`.
7. The client application iterates through the returned result and examines each LeadConvertResult object to determine whether conversion succeeded for each lead.
8. As an optional best practice, the client application creates tasks in which the `WhoId` is the `ContactId` and, if an opportunity is created, the `WhatId` is the `OpportunityId`.
9. Optionally, when converting leads owned by a queue, the owner must be specified. This is because accounts and contacts cannot be owned by a queue. Even if you are specifying an existing account or contact, you must still specify an owner.

Sample Code—Java

This sample shows how to convert leads. It creates two leads and converts them. Next, it iterates through the lead conversion results and writes the IDs of the account, contact, and opportunity created for each lead.

```
public String[] convertLeadRecords() {
   String[] result = new String[4];
   try {

      // Create two leads to convert
      Lead[] leads = new Lead[2];
      Lead lead = new Lead();
      lead.setLastName("Mallard");
      lead.setFirstName("Jay");
      lead.setCompany("Wingo Ducks");
      lead.setPhone("(707) 555-0328");
      leads[0] = lead;
```

```
      lead = new Lead();
      lead.setLastName("Platypus");
      lead.setFirstName("Ogden");
      lead.setCompany("Denio Water Co.");
      lead.setPhone("(775) 555-1245");
      leads[1] = lead;
      SaveResult[] saveResults = connection.create(leads);

      // Create a LeadConvert array to be used
      // in the convertLead() call
      LeadConvert[] leadsToConvert = new LeadConvert[saveResults.length];

      for (int i = 0; i < saveResults.length; ++i) {
         if (saveResults[i].isSuccess()) {
            System.out
                  .println("Created new Lead: " + saveResults[i].getId());
            leadsToConvert[i] = new LeadConvert();
            leadsToConvert[i].setConvertedStatus("Closed - Converted");
            leadsToConvert[i].setLeadId(saveResults[i].getId());
            result[0] = saveResults[i].getId();
         } else {
            System.out.println("\nError creating new Lead: "
                  + saveResults[i].getErrors()[0].getMessage());
         }
      }
      // Convert the leads and iterate through the results
      LeadConvertResult[] lcResults = connection.convertLead(leadsToConvert);
      for (int j = 0; j < lcResults.length; ++j) {
         if (lcResults[j].isSuccess()) {
            System.out.println("Lead converted successfully!");
            System.out.println("Account ID: " + lcResults[j].getAccountId());
            System.out.println("Contact ID: " + lcResults[j].getContactId());
            System.out.println("Opportunity ID: "
                  + lcResults[j].getOpportunityId());
         } else {
            System.out.println("\nError converting new Lead: "
                  + lcResults[j].getErrors()[0].getMessage());
         }
      }
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
   return result;
}
```

Sample Code—C#

This sample shows how to convert leads. It creates two leads and converts them. Next, it iterates through the lead conversion results and writes the IDs of the account, contact, and opportunity created for each lead.

```
public String[] convertLeadRecords()
{
   String[] result = new String[4];
```

```
try
{
   // Create two leads to convert
   Lead[] leads = new Lead[2];
   Lead lead = new Lead();
   lead.LastName = "Mallard";
   lead.FirstName = "Jay";
   lead.Company = "Wingo Ducks";
   lead.Phone = "(707) 555-0328";
   leads[0] = lead;
   lead = new Lead();
   lead.LastName = "Platypus";
   lead.FirstName = "Ogden";
   lead.Company = "Denio Water Co.";
   lead.Phone = "(775) 555-1245";
   leads[1] = lead;
   SaveResult[] saveResults = binding.create(leads);

   // Create a LeadConvert array to be used
   //   in the convertLead() call
   LeadConvert[] leadsToConvert =
         new LeadConvert[saveResults.Length]; ;
   for (int i = 0; i < saveResults.Length; ++i)
   {
      if (saveResults[i].success)
      {
         Console.WriteLine("Created new Lead: " +
               saveResults[i].id);
         leadsToConvert[i] = new LeadConvert();
         leadsToConvert[i].convertedStatus = "Closed - Converted";
         leadsToConvert[i].leadId = saveResults[i].id;
         result[0] = saveResults[i].id;
      }
      else
      {
         Console.WriteLine("\nError creating new Lead: " +
               saveResults[i].errors[0].message);
      }
   }
   // Convert the leads and iterate through the results
   LeadConvertResult[] lcResults =
         binding.convertLead(leadsToConvert);
   for (int j = 0; j < lcResults.Length; ++j)
   {
      if (lcResults[j].success)
      {
         Console.WriteLine("Lead converted successfully!");
         Console.WriteLine("Account ID: " +
                  lcResults[j].accountId);
         Console.WriteLine("Contact ID: " +
                  lcResults[j].contactId);
         Console.WriteLine("Opportunity ID: " +
                  lcResults[j].opportunityId);
      }
```

```
            else
            {
               Console.WriteLine("\nError converting new Lead: " +
                     lcResults[j].errors[0].message);
            }
         }
      }
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                        e.Message + "\n" + e.StackTrace);
   }
   return result;
}
```

LeadConvert Arguments

This call accepts an array of LeadConvert objects (100 maximum). A LeadConvert object contains the following properties.

Name	Type	Description
`accountId`	ID	ID of the Account into which the lead will be merged. Required only when updating an existing account, including person accounts. If no `accountID` is specified, then the API creates a new account. To create a new account, the client application must be logged in with sufficient access rights. To merge a lead into an existing account, the client application must be logged in with read/write access to the specified account. The account name and other existing data are not overwritten. For information on IDs, see ID Field Type.
`contactId`	ID	ID of the Contact into which the lead will be merged (this contact must be associated with the specified `accountId`, and an `accountId` must be specified). Required only when updating an existing contact. **Important:** If you're converting a lead into a person account, do not specify the `contactId` or an error will result. Specify only the `accountId` of the person account. If no `contactID` is specified, then the API creates a contact that is implicitly associated with the Account. To create a new contact, the client application must be logged in with sufficient access rights. To merge a lead into an existing contact, the client application must be logged in with read/write access to the specified contact. The contact name and other existing data aren't overwritten (unless `overwriteLeadSource` is set to `true`, in which case only the `LeadSource` field is overwritten).

`convertedStatus`	string	Valid LeadStatus value for a converted lead. Required. To obtain the list of possible values, the client application queries the LeadStatus object. For example:
		
		`SELECT Id, MasterLabel`
		`FROM LeadStatus WHERE IsConverted=true`

Name	Type	Description
doNotCreateOpportunity	boolean	Specifies whether to create an Opportunity during lead conversion (false, the default) or not (true). Set this flag to true only if you don't want to create an opportunity from the lead. An opportunity is created by default.
leadId	ID	ID of the Lead to convert. Required. For information on IDs, see ID Field Type.
opportunityId	ID	The ID of an existing opportunity to relate to the lead. The opportunityId and opportunityName arguments are mutually exclusive. Specifying a value for both results in an error. If doNotCreateOpportunity argument is true, then no Opportunity is created and this field must be left blank; otherwise, an error is returned.
opportunityName	string	Name of the opportunity to create. If no name is specified, then this value defaults to the company name of the lead. The maximum length of this field is 80 characters. The opportunityId and opportunityName arguments are mutually exclusive. Specifying a value for both results in an error. If doNotCreateOpportunity argument is true, then no Opportunity is created and this field must be left blank; otherwise, an error is returned.
overwriteLeadSource	boolean	Specifies whether to overwrite the LeadSource field on the target Contact object with the contents of the LeadSource field in the source Lead object (true), or not (false, the default). To set this field to true, the client application must specify a contactId for the target contact.
ownerId	ID	Specifies the ID of the person to own any newly created account, contact, and opportunity. If the client application doesn't specify this value, then the owner of the new object will be the owner of the lead. Not applicable when merging with existing objects—if an ownerId is specified, the API doesn't overwrite the ownerId field in an existing account or contact. For information on IDs, see ID Field Type.
relatedPersonAccountId	ID	When converting a lead to a business account and a person account instead of a contact, specifies the ID of the *existing* person account to convert the lead to.
relatedPersonAccountRecord	Entity	When converting a lead to a business account and a person account instead of a contact, specifies the entity record of the *new* person account to convert the lead to.
sendNotificationEmail	boolean	Specifies whether to send a notification email to the owner specified in the ownerId (true) or not (false, the default).

Response

LeadConvertResult[]

Fault

UnexpectedErrorFault

SEE ALSO:

API Call Basics

https://developer.salesforce.com/page/Sample_SOAP_Messages-create

LeadConvertResult

This call returns an array of `LeadConvertResult` objects. Each element in the `LeadConvertResult` array corresponds to the LeadConvert[] array passed as the `leadConverts` parameter in the `convertLead()` call. For example, the object returned in the first index in the `LeadConvertResult` array matches the object specified in the first index of the LeadConvert[] array. A `LeadConvertResult` object has the following properties:

Name	Type	Description
`accountId`	ID	ID of the new Account (if a new account was specified) or the ID of the account specified when `convertLead()` was invoked.
`contactId`	ID	ID of the new Contact (if a new contact was specified) or the ID of the contact specified when `convertLead()` was invoked. For information on IDs, see ID Field Type.
`leadId`	ID	ID of the converted Lead. For information on IDs, see ID Field Type.
`opportunityId`	ID	ID of the new or existing Opportunity, if one was created or related to the lead when `convertLead()` was invoked. For information on IDs, see ID Field Type.
`relatedPersonAccountId`	ID	ID of the new or existing related Person Account, if one was created or related to the lead when `convertLead()` was invoked. For information on IDs, see ID Field Type.
`success`	boolean	Indicates whether the `convertLead()` call succeeded (`true`) or not (`false`) for this object.
`errors`	Error[]	If an error occurred during the `create()` call, an array of one or more Error objects providing the error code and description.

`create()`

Adds one or more new records to your organization’s data.

Syntax

```
SaveResult[] = connection.create(sObject[] sObjects);
```

Usage

Use `create()` to add one or more records, such as an Account or Contact record, to your organization’s information. The `create()` call is analogous to the INSERT statement in SQL.

When creating objects, consider the following rules and guidelines.

Permissions

Your client application must be logged in with sufficient access rights to create records within the specified object. For more information, see Factors that Affect Data Access.

Special Handling

Certain objects—and certain fields within those objects—require special handling or permissions. For example, you might also need permissions to access the object's parent object. Before you attempt to `create()` a record for a particular object, be sure to read its description in the Standard Objects.

Createable Fields

Only objects where `createable` is `true` can be created via the `create()` call. To determine whether a given object can be created, your client application can invoke the `describeSObjects()` call on the object and inspect its `createable` property.

Automatically Maintained Fields

The API generates unique values for ID fields automatically. For `create()`, you cannot explicitly specify an ID value in the sObject. The SaveResult[] object contains the ID of each record that was successfully created. For information on IDs, see ID Field Type.

The API populates certain fields automatically, such as `CreatedDate`, `CreatedById`, `LastModifiedDate`, `LastModifiedById`, and `SystemModstamp`. You cannot explicitly specify these values.

Required Fields

For required fields that do not have a preconfigured default value, you must supply a value. For more information, see Required Fields.

Default Values

For some objects, some fields have a default value, such as `OwnerID`. If you do not specify a value for such fields, the API populates the fields with the default value. For example, if you do not override `OwnerID`, then the API populates this field with the user ID associated with the user as whom your client application is logged in.

- For required fields that do not have a preconfigured default value, you must supply a value.
- For all other fields in the object, if you do not explicitly specify a value, then its value is `null (VT_EMPTY)`.

Referential Integrity

Your client application must conform to the rules of referential integrity. For example, if you are creating a record for an object that is the child of a parent object, you must supply the foreign key information that links the child to the parent. For example, when creating a CaseComment, you must supply the valid case ID for the parent Case, and that parent Case must exist in the database.

Valid Data Values

You must supply values that are valid for the field's data type, such as integers (not alphabetic characters) for integer fields. In your client application, follow the data formatting rules specified for your programming language and development tool (your development tool will handle the appropriate mapping of data types in SOAP messages).

String Values

When storing values in string fields, the API trims any leading and trailing whitespace. For example, if the value of a name field is entered as `" ABC Company "`, then the value is stored in the database as `"ABC Company"`.

Starting with API version 15.0, if you specify a value for a field that contains a string, and the value is too big for the field, the call fails and an error is returned. In previous versions of the API the value was truncated and the call succeeded. If you wish to keep the old behavior with versions 15.0 and later, use the AllowFieldTruncationHeader SOAP header.

Assignment Rules

When creating new Account (accounts fire Territory Management assignment rules), Case, or Lead records, your client application can set options in the AssignmentRuleHeader to have the case or lead automatically assigned to one or more users based on assignment rules configured in the Salesforce user interface.

Maximum Number of Records Created

Your client application can add up to 200 records in a single `create()` call. If a create request exceeds 200 records, then the entire operation fails.

Rollback on Error

The AllOrNoneHeader header allows you to roll back all changes unless all records are processed successfully. This header is available in API version 20.0 and later. Allows a call to roll back all changes unless all records are processed successfully.

Automatic Subscriptions for Chatter Feeds

To subscribe to records they create, users must enable the `Automatically follow records that I create` option in their personal settings. If users have automatic subscriptions enabled, they automatically follow the records they create and see changes to those records in their Chatter feed on the Home tab.

A user can subscribe to a record or to another user. Changes to the record and updates from the users are displayed in the Chatter feed on the user's home page, which is a useful way to stay up-to-date with other users and with changes made to records in Salesforce. Feeds are available in API version 18.0 and later. The EntitySubscription object represents a subscription of a user following a record or another user.

Disabling Feed Notifications

If you're processing a large number of records and don't want to track the changes in various feeds related to the records, use DisableFeedTrackingHeader. This is especially useful for bulk changes.

Creating Records for Different Object Types

You can create records for multiple object types, including custom objects, in one call with API version 20.0 and later. For example, you could create a contact and an account in one call. You can create records for up to 10 object types in one call.

Records are saved in the same order that they are entered in the `sObjects` input array. If you are entering new records that have a parent-child relationship, the parent record must precede the child record in the `sObjects` array. For example, if you are creating a contact that references an account that is also being created in the same call, the account must have a smaller index in the `sObjects` array than the contact does. The contact references the account by using an `External ID` field.

You can't add a record that references another record of the same object type in the same call. For example, the Contact object has a `Reports To` field that is a reference to another contact. You can't create two contacts in one call if one contact uses the `Reports To` field to reference a second contact in the `sObjects` array. You can create a contact that references another contact that has been previously created.

Records for different object types are broken into multiple chunks by Salesforce. A chunk is a subset of the `sObjects` input array and each chunk contains records of one object type. Data is committed on a chunk-by-chunk basis. Any Apex triggers related to the records in a chunk are invoked once per chunk. Consider an `sObjects` input array containing the following set of records:

```
account1, account2, contact1, contact2, contact3, case1, account3, account4, contact4
```

Salesforce splits the records into five chunks:

1. `account1, account2`
2. `contact1, contact2, contact3`
3. `case1`
4. `account3, account4`
5. `contact4`

Each call can process up to 10 chunks. If the `sObjects` array contains more than 10 chunks, you must process the records in more than one call.

Warning: You can't create records for multiple object types in one call if one of those types is related to a feature in the Setup area in Salesforce. The only exceptions are the following objects:

- Custom settings objects, which are similar to custom objects. For more information, see “Create Custom Settings” in the Salesforce online help.
- GroupMember
- Group
- User if the `UserRoleId` field is not being set.

`create()` and Foreign Keys

You can use external ID fields as a foreign key, which allows you to create a record and relate it to another existing record in a single step instead of querying the parent record ID first. To do this, set the foreign key field to an instance of the parent sObject that only has the external ID field specified. This external ID should match the external ID value on the parent record.

The following Java and C# examples show you how to create an opportunity and relate it to an existing account using a custom external ID field named `MyExtId__c`. Each example creates an opportunity, sets the required fields, and then sets the opportunity external ID field to the account object that has only the external ID field specified. The code then creates the opportunity. Once the opportunity is created, the account will be its parent.

Java Example

```
public void createForeignKeySample() {
   try {
      Opportunity newOpportunity = new Opportunity();
      newOpportunity.setName("OpportunityWithFK");
      newOpportunity.setStageName("Prospecting");
      Calendar dt = connection.getServerTimestamp().getTimestamp();
      dt.add(Calendar.DAY_OF_MONTH, 7);
      newOpportunity.setCloseDate(dt);

      Account parentAccountRef = new Account();
      parentAccountRef.setMyExtId__c("SAP1111111");
      newOpportunity.setAccount(parentAccountRef);

      SaveResult[] results = connection
            .create(new SObject[] { newOpportunity });
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

C# Example

```
public void createForeignKeySample()
{
   try
   {
      Opportunity newOpportunity = new Opportunity();
      newOpportunity.Name = "OpportunityWithFK";
      newOpportunity.StageName = "Prospecting";
      DateTime dt = (DateTime)binding.getServerTimestamp().timestamp;
      newOpportunity.CloseDate = dt.AddDays(7);
      newOpportunity.CloseDateSpecified = true;

      // Create the parent reference.
      // Used only for foreign key reference
      //  and doesn't contain any other fields
      Account accountReference = new Account();
      accountReference.MyExtId__c = "SAP1111111";
      newOpportunity.Account = accountReference;

      // Create the account and the opportunity
      SaveResult[] results = binding.create(new sObject[] {
                              newOpportunity });
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                              e.Message + "\n" + e.StackTrace);
   }
}
```

Creating Parent and Child Records in a Single Call Using Foreign Keys

You can use external ID fields as foreign keys to create parent and child records of different sObject types in a single call instead of creating the parent record first, querying its ID, and then creating the child record. To do this:

- Create the child sObject and populate its required fields, and optionally other fields.
- Create the parent reference sObject used only for setting the parent foreign key reference on the child sObject. This sObject has only the external ID field defined and no other fields set.
- Set the foreign key field of the child sObject to the parent reference sObject you just created.
- Create another parent sObject to be passed to the `create()` call. This sObject must have the required fields (and optionally other fields) set in addition to the external ID field.
- Call `create()` by passing it an array of sObjects to create. The parent sObject must precede the child sObject in the array, that is, the array index of the parent must be lower than the child's index.

The parent and child records are records related through a predefined relationship, such as a master-detail or lookup relationship. You can create related records that are up to 10 levels deep. Also, the related records created in a single call must have different sObject types. For more information, see Creating Records for Different Object Types.

The following Java and C# examples show you how to create an opportunity with a parent account in the same `create()` call. Each example creates an Opportunity sObject and populates some of its fields, then creates two Account objects. The first account is only for the foreign key relationship, and the second is for the account creation and has the account fields set. Both accounts have the external ID field, `MyExtID__c`, set. Next, the sample calls `create()` by passing it an array of sObjects. The first element in the array is the parent sObject and the second is the opportunity sObject. The `create()` call creates the opportunity with its parent account in a single call. Finally, the sample checks the results of the call and writes the IDs of the created records to the console, or the first error if record creation fails.

Java Example

```
public void createForeignKeySample() {
   try {
      Opportunity newOpportunity = new Opportunity();
      newOpportunity.setName("OpportunityWithAccountInsert");
      newOpportunity.setStageName("Prospecting");
      Calendar dt = connection.getServerTimestamp().getTimestamp();
      dt.add(Calendar.DAY_OF_MONTH, 7);
      newOpportunity.setCloseDate(dt);

      // Create the parent reference.
      // Used only for foreign key reference
      // and doesn't contain any other fields.
      Account accountReference = new Account();
      accountReference.setMyExtID__c("SAP111111");
      newOpportunity.setAccount(accountReference);

      // Create the Account object to insert.
      // Same as above but has Name field.
      // Used for the create call.
      Account parentAccount = new Account();
      parentAccount.setName("Hallie");
      parentAccount.setMyExtID__c("SAP111111");

      // Create the account and the opportunity.
      SaveResult[] results = connection.create(new SObject[] {
            parentAccount, newOpportunity });
```

```
      // Check results.
      for (int i = 0; i < results.length; i++) {
         if (results[i].isSuccess()) {
            System.out.println("Successfully created ID: "
                  + results[i].getId());
         } else {
            System.out.println("Error: could not create sobject "
                  + "for array element " + i + ".");
            System.out.println("   The error reported was: "
                  + results[i].getErrors()[0].getMessage() + "\n");
         }
      }
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

C# Example

```
public void createForeignKeySample()
{
   try
   {
      Opportunity newOpportunity = new Opportunity();
      newOpportunity.Name = "OpportunityWithAccountInsert";
      newOpportunity.StageName = "Prospecting";
      DateTime dt = (DateTime)binding.getServerTimestamp().timestamp;
      newOpportunity.CloseDate = dt.AddDays(7);
      newOpportunity.CloseDateSpecified = true;

      // Create the parent reference.
      // Used only for foreign key reference
      //  and doesn't contain any other fields.
      Account accountReference = new Account();
      accountReference.MyExtID__c = "SAP111111";
      newOpportunity.Account = accountReference;

      // Create the Account object to insert.
      // Same as above but has Name field.
      // Used for the create call.
      Account parentAccount = new Account();
      parentAccount.Name = "Hallie";
      parentAccount.MyExtID__c = "SAP111111";

      // Create the account and the opportunity.
      SaveResult[] results = binding.create(new sObject[] {
      parentAccount, newOpportunity });

      // Check results.
      for (int i = 0; i < results.Length; i++)
      {
         if (results[i].success)
         {
            Console.WriteLine("Successfully created ID: "
```

```
                  + results[i].id);
         }
         else
         {
            Console.WriteLine("Error: could not create sobject "
                  + "for array element " + i + ".");
            Console.WriteLine("   The error reported was: "
                  + results[i].errors[0].message + "\n");
         }
      }
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                                 e.Message + "\n" + e.StackTrace);
   }
}
```

Basic Steps for Creating Records

Creating records involves the following basic steps:

1. Create an sObject for one or more objects. For each record, populate its fields with the data that you want to add.
2. Construct an sObject[] array and populate that array with the objects that you want to create.
3. Call `create()`, passing in the sObject[] array.
4. Process the results in the `SaveResult`[] object to verify whether the records have been successfully created.

Sample Code—Java

This sample shows how to create records. It creates two Account objects and sets their fields. The Name of the second account isn't set so that an error occurs on creation, since Name is a required field. After making the `create()` call by passing the array containing the two accounts, the sample iterates over the results and writes the ID of the new account or an error message if the account creation fails. Finally, the sample returns an array of the new account IDs, which in this case contains only one ID.

```
public String[] createRecords() {
   // Create two accounts
   String[] result = new String[2];
   Account account1 = new Account();
   Account account2 = new Account();

   // Set some fields on the account object
   account1.setName("The Brick Hut");
   account1.setBillingStreet("403 McAdoo St");
   account1.setBillingCity("Truth or Consequences");
   account1.setBillingState("NM");
   account1.setBillingPostalCode("87901");
   account1.setBillingCountry("US");
   // Required Name field is not being set on account2,
   // so this record should fail during create.
   // account2.setName("Camp One Creations");
   account2.setBillingStreet("25800 Arnold Dr");
```

```
    account2.setBillingCity("Sonoma");
    account2.setBillingState("CA");
    account2.setBillingPostalCode("95476");
    account2.setBillingCountry("US");
    Account[] accounts = { account1, account2 };

    try {
       // Call create() to add the accounts
       SaveResult[] saveResults = connection.create(accounts);
       // Iterate through the results.
       // There should be one successful creation
       // and one failed creation.
       for (int i = 0; i < saveResults.length; i++) {
          if (saveResults[i].isSuccess()) {
             System.out.println("Successfully created Account ID: "
                   + saveResults[i].getId());
             result[i] = saveResults[i].getId();
          } else {
             System.out.println("Error: could not create Account "
                   + "for array element " + i + ".");
             System.out.println("   The error reported was: "
                   + saveResults[i].getErrors()[0].getMessage() + "\n");
             result[i] = saveResults[i].getId();
          }
       }
    } catch (ConnectionException ce) {
       ce.printStackTrace();
    }
    return result;
}
```

Sample Code—C#

This sample shows how to create records. It creates two Account objects and sets their fields. The Name of the second account isn't set so that an error occurs on creation, since Name is a required field. After making the `create()` call by passing the array containing the two accounts, the sample iterates over the results and writes the ID of the new account or an error message if the account creation fails. Finally, the sample returns an array of the new account IDs, which in this case contains only one ID.

```
public String[] createRecords()
{
    // Create two accounts
    String[] result = new String[2];
    Account account1 = new Account();
    Account account2 = new Account();

    // Set some fields on the account object
    account1.Name = "The Brick Hut";
    account1.BillingStreet = "403 McAdoo St";
    account1.BillingCity = "Truth or Consequences";
    account1.BillingState = "NM";
    account1.BillingPostalCode = "87901";
    account1.BillingCountry = "US";
    // Required Name field is not being set on account2,
```

```
        // so this record should fail during create.
        // account2.Name = "Camp One Creations";
        account2.BillingStreet = "25800 Arnold Dr";
        account2.BillingCity = "Sonoma";
        account2.BillingState = "CA";
        account2.BillingPostalCode = "95476";
        account2.BillingCountry = "US";
        Account[] accounts = { account1, account2 };

        try
        {
            // Call create() to add the accounts
            SaveResult[] saveResults = binding.create(accounts);
            // Iterate through the results.
            // There should be one successful creation
            //   and one failed creation.
            for (int i = 0; i < saveResults.Length; i++)
            {
                if (saveResults[i].success)
                {
                    Console.WriteLine("Successfully created Account ID: " +
                          saveResults[i].id);
                    result[i] = saveResults[i].id;
                }
                else
                {
                    Console.WriteLine("Error: could not create Account " +
                          "for array element " + i + "."
                    );
                    Console.WriteLine("   The error reported was: " +
                    saveResults[i].errors[0].message + "\n");
                    result[i] = saveResults[i].id;
                }
            }
        }
        catch (SoapException e)
        {
            Console.WriteLine("An unexpected error has occurred: " +
                                     e.Message + "\n" + e.StackTrace);
        }

        return result;
}
```

Arguments

Name	Type	Description
`sObjects`	sObject[]	Array of one or more sObject objects to `create()`. Limit: 200 sObject values.

Response

SaveResult[]

Faults

`InvalidSObjectFault`

`UnexpectedErrorFault`

SEE ALSO:

- upsert()
- API Call Basics
- https://developer.salesforce.com/page/Sample_SOAP_Messages-create

SaveResult

The `create()` call returns an array of `SaveResult` objects. Each element in the `SaveResult` array corresponds to the sObject[] array passed as the `sObjects` parameter in the `create()` call. For example, the object returned in the first index in the `SaveResult` array matches the object specified in the first index of the sObject[] array. A `SaveResult` object has the following properties:

Name	Type	Description
`id`	ID	ID of the sObject that you attempted to `create()`. If this field contains a value, then the object was created successfully. If this field is empty, then the object was not created and the API returned error information instead.
`success`	boolean	Indicates whether the `create()` call succeeded (`true`) or not (`false`) for this object.
`errors`	Error[]	If an error occurred during the `create()` call, an array of one or more Error objects providing the error code and description. If your organization has active duplicate rules and a duplicate is detected, the SaveResult includes an Error with a data type of DuplicateError.

delete()

Deletes one or more records from your organization's data.

Syntax

```
DeleteResult[] = connection.delete(ID[] ids);
```

Usage

Use `delete()` to delete one or more existing records, such as individual accounts or contacts, in your organization's data. The `delete()` call is analogous to the `DELETE` statement in SQL.

Rules and Guidelines

When deleting objects, consider the following rules and guidelines:

- Your client application must be logged in with sufficient access rights to delete individual objects within the specified object. For more information, see Factors that Affect Data Access.
- In addition, you might also need permission to access this object's parent object. For special access requirements, see the object's description in Standard Objects.
- To ensure referential integrity, the `delete()` call supports cascading deletions. If you delete a parent object, you delete its children automatically, as long as each child object can be deleted. For example, if you delete a Case, the API automatically deletes any CaseComment, CaseHistory, and CaseSolution objects associated with that case. However, if a CaseComment is not deletable or is currently being used, then the `delete()` call on the parent Case will fail.
- Certain objects cannot be deleted via the API. To delete an object via the `delete()` call, its object must be configured as deletable (`deletable` is `true`). To determine whether a given object can be deleted, your client application can invoke the `describeSObjects()` call on the object and inspect its `deletable` property.
- You can't delete records for multiple object types in one call if one of those types is related to a feature in the Setup area in Salesforce. The only exceptions are the following objects:
  - Custom settings objects, which are similar to custom objects. For more information, see "Create Custom Settings" in the Salesforce online help.
  - GroupMember
  - Group
  - User

Rollback on Error

The AllOrNoneHeader header allows you to roll back all changes unless all records are processed successfully. This header is available in API version 20.0 and later. Allows a call to roll back all changes unless all records are processed successfully.

Basic Steps for Deleting Records

Deleting records involves the following basic steps:

1. Determine the ID of each record that you want to delete. For example, you might call `query()` to retrieve a set of records that you want to delete based on specific criteria.
2. Construct an ID[] array and populate it with the IDs of each record that you want to delete. You can specify the IDs of different types of objects in the same call. For example, you could specify the ID for an individual Account and an individual Contact in the same array. For information on IDs, see ID Field Type.
3. Call `delete()`, passing in the ID[] array.
4. Process the results in the `DeleteResult`[] to verify whether the records have been successfully deleted.

Sample Code—Java

This sample shows how to delete records based on record IDs. The method in this sample accepts an array of IDs, which it passes to the `delete()` call and makes the call. It then parses the results and writes the IDs of the deleted records to the console or the first returned error if the deletion failed.

```
public void deleteRecords(String[] ids) {
   try {
      DeleteResult[] deleteResults = connection.delete(ids);
      for (int i = 0; i < deleteResults.length; i++) {
         DeleteResult deleteResult = deleteResults[i];
         if (deleteResult.isSuccess()) {
            System.out
                  .println("Deleted Record ID: " + deleteResult.getId());
         } else {
            // Handle the errors.
            // We just print the first error out for sample purposes.
            Error[] errors = deleteResult.getErrors();
            if (errors.length > 0) {
               System.out.println("Error: could not delete " + "Record ID "
                     + deleteResult.getId() + ".");
               System.out.println("   The error reported was: ("
                     + errors[0].getStatusCode() + ") "
                     + errors[0].getMessage() + "\n");
            }
         }
      }
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Sample Code—C#

This sample shows how to delete records based on record IDs. The method in this sample accepts an array of IDs, which it passes to the `delete()` call and makes the call. It then parses the results and writes the IDs of the deleted records to the console or the first returned error if the deletion failed.

```
public void deleteRecords(String[] ids)
{
   try
   {
      DeleteResult[] deleteResults = binding.delete(ids);
      for (int i = 0; i < deleteResults.Length; i++)
      {
         DeleteResult deleteResult = deleteResults[i];
         if (deleteResult.success)
         {
            Console.WriteLine("Deleted Record ID: " + deleteResult.id);
         }
         else
         {
            // Handle the errors.
```

```
            // We just print the first error out for sample purposes.
            Error[] errors = deleteResult.errors;
            if (errors.Length > 0)
            {
               Console.WriteLine("Error: could not delete " + "Record ID "
                     + deleteResult.id + ".");
               Console.WriteLine("   The error reported was: ("
                     + errors[0].statusCode + ") "
                     + errors[0].message + "\n");
            }
         }
      }
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                                 e.Message + "\n" + e.StackTrace);
   }
}
```

Arguments

Name	Type	Description
`ids`	ID[]	Array of one or more IDs associated with the objects to delete. In version 7.0 and later, you can pass a maximum of 200 object IDs to the `delete()` call. In version 6.0 and earlier, the limit is 2,000.

Response

DeleteResult[]

Faults

`InvalidSObjectFault`

`UnexpectedErrorFault`

SEE ALSO:

API Call Basics

https://developer.salesforce.com/page/Sample_SOAP_Messages-create

DeleteResult

The `delete()` call returns an array of `DeleteResult` objects. Each element in the `DeleteResult` array corresponds to the ID[] array passed as the `ids` parameter in the `delete()` call. For example, the object returned in the first index in the `DeleteResult` array matches the object specified in the first index of the ID[] array.

A `DeleteResult` object has the following properties:

Name	Type	Description
`id`	ID	ID of an sObject that you attempted to delete. For information on IDs, see ID Field Type.
`success`	boolean	Indicates whether the `delete()` call succeeded (`true`) or not (`false`) for this object.
`errors`	Error[]	If an error occurred during the `delete()` call, an array of one or more Error objects providing the error information.

deleteByExample()

Use `deleteByExample()` to delete big object data from your org using an sObject as a template for what to delete. All data in a big object matching the values in the sObject templates are deleted.

Syntax

```
DeleteByExampleResult[] = connection.deleteByExample(sObject[] sObjects);
```

Rules and Guidelines

When deleting data, consider the following rules and guidelines:

- Your client application must be logged in with sufficient access rights to delete individual objects within the specified object. For more information, see Factors that Affect Data Access.
- You can't delete records for multiple object types in one call if one of those types is related to a feature in the Setup area in Salesforce. The only exceptions are the following objects:
  - Custom settings objects, which are similar to custom objects. For more information, see "Create Custom Settings" in the Salesforce Help.
  - GroupMember
  - Group
  - User

Basic Steps for Deleting Data

Deleting data involves the following basic steps:

1. Define an sObject using all the fields that make up the index of the big object.
2. Specify the values for each field.
3. Call `deleteByExample()`, passing in the sObject you created.
4. Process the results in the `DeleteByExampleResult[]` to verify whether the records have been successfully deleted.

Note: Repeating a successful `deleteByExample()` operation results in success, even if the data has already been deleted.

Sample Code—Custom Big Objects

This sample shows how to delete records in a custom big object. In this example, `Account__c`, `Game_Platform__c`, and `Play_Date__c` are part of the custom big object's index. All rows where `Account__c` is "001d000000Ky3xIAB", `Game_Platform__c` is "iOS", and `Play_Date__c` is "2017-11-28T19:13:36.000z" are deleted.

```
public static void main(String[] args) {
    try{
        //Declare an sObject that has the values to delete
        sObject[] sObjectsToDelete = new sObject[1];
        sObject[] customerBO = new sObject();
        customerBO.setType("Customer_Interaction__b");
        customerBO.setField("Account__c","001d000000Ky3xIAB");
        customerBO.setField("Game_Platform__c","iOS");
        customerBO.setField("Play_Date__c","2017-11-28T19:13:36.000z");
        sObjectsToDelete[0] = customerBO;

        DeleteByExampleResult[] result = connection.deleteByExample(sObjectsToDelete);
    }
}
```

Sample Code—Field Audit Trail

This sample shows how to delete records in `FieldHistoryArchive`. All rows with the specified criteria are deleted.

```
public static void main(String[] args) {
    try{
        //Declare an sObject that has the values to delete
        sObject[] sObjectsToDelete = new sObject[2];
        sObject[] fieldHistoryArchive_1 = new sObject();
        fieldHistoryArchive_1.setType("FieldHistoryArchive");
        fieldHistoryArchive_1.setField("FieldHistoryType","Account");
        fieldHistoryArchive_1.setField("ParentId","001d000000Ky3xIAB");
        fieldHistoryArchive_1.setField("CreatedDate","2017-11-28T19:13:36.000z");
        fieldHistoryArchive_1.setField("HistoryId","017D000000ESURXIA5");
        sObjectsToDelete[0] = fieldHistoryArchive_1;

        sObject[] fieldHistoryArchive_2 = new sObject();
        fieldHistoryArchive_2.setType("FieldHistoryArchive");
        fieldHistoryArchive_2.setField("FieldHistoryType","Account");
        fieldHistoryArchive_2.setField("ParentId","001d000000Ky3xIAB");
        fieldHistoryArchive_2.setField("CreatedDate","2017-11-29T19:13:36.000z");
        fieldHistoryArchive_2.setField("HistoryId","017D000000ESURMIA5");
        sObjectsToDelete[1] = fieldHistoryArchive_2;

        DeleteByExampleResult[] result = connection.deleteByExample(sObjectsToDelete);
    }
}
```

Arguments

Name	Type	Description
`sObject`	sObject[]	Array of one or more sObjects to use as templates for deletion.

Response

DeleteByExampleResult[]

Faults

`InvalidSObjectFault`

`UnexpectedErrorFault`

DeleteByExampleResult

The `deleteByExample()` call returns an array of `DeleteByExampleResult` objects. Each element in the `DeleteByExampleResult` array corresponds to the sObject[] array passed in the `deleteByExample()` call. For example, the object returned in the first index in the `DeleteByExampleResult` array matches the sObject specified in the first index of the sObject[] array.

A `DeleteByExampleResult` object has the following properties:

Name	Type	Description
`entity`	sObject	Details for the sObject that you attempted to delete.
`rowCount`	long	Indicates the number of rows that were deleted.
`success`	boolean	Indicates whether the `deleteByExample()` call succeeded (`true`) or not (`false`) for this object.
`errors`	Error[]	If an error occurred during the `deleteByExample()` call, an array of one or more Error objects providing the error information.

`emptyRecycleBin()`

Delete records from the recycle bin immediately.

Syntax

```
EmptyRecycleBinResult[] = connection.emptyRecycleBin(ID[] ids);
```

Usage

The Recycle Bin lets you view and restore recently deleted records for 15 days before they are permanently deleted. Your org can have up to 5,000 records per license in the Recycle Bin at any one time. For example, if your org has five user licenses, 25,000 records can be stored in the Recycle Bin. If your org reaches its Recycle Bin limit, Salesforce automatically removes the oldest records, as long as they have been in the recycle bin for at least two hours.

If you know you will be adding a great number of records to the Recycle Bin and you know you won't need to `undelete()` them, you may wish to remove them before the Salesforce process deletes records. For example, you can use this call if you are loading a large number of records for testing, or if you are doing a large number of `create()` calls followed by `delete()` calls.

Rules and Guidelines

When emptying recycle bins, consider the following rules and guidelines:

- The logged in user can delete any record that he or she can query in their Recycle Bin, or the recycle bins of any subordinates. If the logged in user has Modify All Data permission, he or she can query and delete records from any Recycle Bin in the organization.
- Available in version 10.0 and later.
- Maximum number of records is 200.
- Do not include the IDs of any records that will be cascade deleted, or an error will occur.
- Once records are deleted using this call, they cannot be `undelete()`d.
- After records are deleted from the Recycle Bin using this call, they can be queried using `queryAll()` for some time. Typically this time is 24 hours, but may be shorter or longer.

Sample Code—Java

This sample shows how to empty the Recycle Bin. It accepts an array containing the IDs of the records to remove from the Recycle Bin. It calls `emptyRecycleBin()` and passes it the array of IDs. Next, it iterates over the results and writes the IDs of the removed records or the first error of the failed records to the console.

```
public void emptyRecycleBin(String[] ids) {
   try {
      EmptyRecycleBinResult[] emptyRecycleBinResults = connection
            .emptyRecycleBin(ids);
      for (int i = 0; i < emptyRecycleBinResults.length; i++) {
         EmptyRecycleBinResult emptyRecycleBinResult = emptyRecycleBinResults[i];
         if (emptyRecycleBinResult.isSuccess()) {
            System.out.println("Recycled ID: "
                  + emptyRecycleBinResult.getId());
         } else {
            Error[] errors = emptyRecycleBinResult.getErrors();
            if (errors.length > 0) {
               System.out
                     .println("Error code: " + errors[0].getStatusCode());
               System.out
                     .println("Error message: " + errors[0].getMessage());
            }
         }
      }
   } catch (ConnectionException ce) {
      ce.printStackTrace();
```

```
    }
}
```

Sample Code—C#

This sample shows how to empty the Recycle Bin. It accepts an array containing the IDs of the records to remove from the Recycle Bin. It calls `emptyRecycleBin()` and passes it the array of IDs. Next, it iterates over the results and writes the IDs of the removed records or the first error of the failed records to the console.

```
public void emptyRecycleBin(String[] ids)
{
   try
   {
      EmptyRecycleBinResult[] emptyRecycleBinResults =
         binding.emptyRecycleBin(ids);
      for (int i = 0; i < emptyRecycleBinResults.Length; i++)
      {
         EmptyRecycleBinResult emptyRecycleBinResult = emptyRecycleBinResults[i];
         if (emptyRecycleBinResult.success)
         {
            Console.WriteLine("Recycled ID: "
                  + emptyRecycleBinResult.id);
         }
         else
         {
            Error[] errors = emptyRecycleBinResult.errors;
            if (errors.Length > 0)
            {
               Console.WriteLine("Error code: " + errors[0].statusCode);
               Console.WriteLine("Error message: " + errors[0].message);
            }
         }
      }
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                                    e.Message + "\n" + e.StackTrace);
   }
}
```

Arguments

Name	Type	Description
ids	ID[]	Array of one or more IDs associated with the records to delete from the Recycle Bin. Maximum number of records is 200.

Response

EmptyRecycleBinResult

Faults

`InvalidSObjectFault`

`UnexpectedErrorFault`

SEE ALSO:

delete()

undelete()

EmptyRecycleBinResult

The `emptyRecycleBin()` call returns an array of `EmptyRecycleBinResult` objects. Each element in the array corresponds to an element in the ID[] array passed as the parameter in the `emptyRecycleBin()` call. For example, the object returned in the first index in the `EmptyRecycleBinResult` array matches the object specified in the first index of the ID[] array.

A `EmptyRecycleBinResult` object has the following properties:

Name	Type	Description
`id`	ID	ID of an sObject that you attempted to delete from the Recycle Bin. For information about IDs, see ID Field Type.
`isSuccess`	boolean	Indicates whether the call succeeded (`true`) or not (`false`) for this record.
`errors`	Error[]	If an error occurred during the call, an array of one or more Error objects providing the error information.

`executeListView()`

Executes a list view's SOQL query to retrieve data, labels, and actions from a list view.

Syntax

```
ExecuteListViewResult result = connection.executeListView(ExecuteListViewResult request);
```

Usage

The `executeListView()` call takes an `ExecuteListViewRequest` object, executes the SOQL query for the list view, and returns the resulting data and presentation information in an `ExecuteListViewResult` object. This call is available in API version 32.0 and later.

Sample Code—Java

```
private void example(ApiProtocol protocol, AppVersion version) throws Exception {

        // Get the list results via the list view API
        EnterpriseConnection connection =
makeClient(getUserUtil().getUserWithModifyAllData(), AppVersion.VERSION_190,
                getName());
        ExecuteListViewRequest request = new ExecuteListViewRequest();
        request.setSobjectType("Account");
        request.setDeveloperNameOrId(listViews[0].getId());
        request.setLimit(50000);

        com.sforce.soap.enterprise.ExecuteListViewResult result =
connection.executeListView(request);
    }
```

Arguments

Name	Type	Description
`request`	ExecuteListViewRequest	An object that specifies the list view and the limit, offset, and ordering of the results.

Response

An `ExecuteListViewResult` object.

ExecuteListViewRequest

Use the `ExecuteListViewRequest` object with `executeListView()` to retrieve data, labels, and actions from a list view.

The `ExecuteListViewRequest` object has the following properties:

Name	Type	Description
`developerNameOrId`	string	The list view's ID or fully qualified developer name.
`limit`	int	The maximum number of records to return. Default: 25
`offset`	int	The number of records to skip. Default: 0
`orderBy`	ListViewOrderBy[]	The order in which to return the records.
`sobjectType`	string	The API name of the sObject for the list view.

ExecuteListViewResult

Contains list view data that you retrieve programmatically.

To retrieve an `executeListViewResult` object, use the `executeListView()` call. The `executeListViewResult` object has the following properties:

Name	Type	Description
`columns`	ListViewColumn[]	An array of the columns in the list view.
`developerName`	string	The list view's fully qualified developer name.
`done`	boolean	If `true`, indicates that all records have been returned.
`id`	ID	The list view's ID.
`label`	string	The display label of the list view.
`records`	ListViewRecord[]	An array of records that match the list view query.
`size`	int	The number of records that are returned by the list view query.

ListViewColumn

Contains metadata about a single list view column.

The `ListViewColumn` object is returned by the `describeSoqlListViews()` and `executeListView()` calls. It has the following properties:

Name	Type	Description
`ascendingLabel`	string	The localized type-specific label for sorting the column in ascending order. For example: "A-Z" for a text field, or "Low to High" for a numeric field. Set to null if the column isn't sortable.
`descendingLabel`	string	The localized type-specific label for sorting the column in ascending order. For example: "Z-A" for a text field, or "High to Low" for a numeric field. Set to null if the column is not sortable.
`fieldNameOrPath`	string	The field name or SOQL field path for the column.
`hidden`	boolean	If true, specifies that the column is not displayed, and is present only to support the display of other columns or other client-side logic.
`label`	string	The localized display label for the column.
`searchable`	boolean	Whether the column is searchable.
`selectListItem`	string	The SOQL SELECT item for the column. The item might differ from the field name or path, due to display formatting (for example, toLabel for picklists).
`sortDirection`	orderByDirection	An enumerated value, one of the following if the column is sortable: • ascending • descending Set to null if the column is not sortable.
`sortIndex`	int	The zero-based index that indicates the column's position within a multilevel sort, or null if the records are not sorted by the column.

Name	Type	Description
sortable	boolean	Whether the column is sortable, in which case it might be referenced in the ExecuteListView orderBy parameter.
type	FieldType	The column data type.

ListViewRecord

Represents a single row in a list view.

The `ListViewRecord` object is a member of the `ExecuteListViewResult` object and has the following properties:

Name	Type	Description
columns	ListViewRecordColumn[]	The columns and their values for the record. The record data columns are returned in the same order as metadata and describe columns. For any data column that's obtained by using `ExecuteListViewResult.getRecords()[0].getColumns[index]`, the corresponding describe column can be obtained with `ExecuteListViewResult.getColumns[index]`.

ListViewRecordColumn

Represents a single cell in a row from a list view.

The `ListViewRecordColumn` object is one cell (column) of a row (`ListViewRecord`) and has the following properties:

Name	Type	Description
fieldNameOrPath	string	The field name or SOQL field path for the column.
value	string	The contents of the record for a certain column, localized if appropriate, or null if there's no value.

findDuplicates()

Performs rule-based searches for duplicate records. The input is an array of sObject, each of which specifies the values to search for and the type of object that supplies the duplicate rules. The output identifies the detected duplicates for each object that supplies the duplicate rules. `findDuplicates()` applies the rules to the values to do the search. The output identifies the detected duplicates for each sObject.

Syntax

```
FindDuplicatesResult[] duplicateResults =
    connection.findDuplicates(SObject[] inputSObjectArray);
```

Usage

Use `findDuplicates()` to apply duplicate rules associated with an object to values specified by each sObject. Each sObject also has a type that corresponds to an object.

`findDuplicates()` uses the duplicate rules for the object that has the same type as the sObject. For example, if the sObject type is Account, `findDuplicates()` uses the duplicate rules associated with the Account object.

Note:

- All the sObject elements in the input array must have the same type, and that type must correspond to an object type that supports duplicate rules.
- The input array is limited to 50 elements. If you exceed this limit, the SOAP call returns an API Fault Element containing the following fields:
  - ExceptionCode: `LIMIT_EXCEEDED`
  - exceptionMessage: `Configuration error: The number of records to check is greater than the permitted batch size.`

For each input `sObject`, `findDuplicates()` adds a FindDuplicatesResult object to the output array.

Matching is controlled by the values specified in the sObject. The values can include a record ID, a field map, or both. The specified values determine the behavior of `findDuplicates()`:

Record ID only

`findDuplicates()` searches the object defined by the duplicate rule for an existing record that has the same ID. Then it loads the values from that record, and searches for duplicates based on those values.

Field Map only

`findDuplicates()` loads the values from the map and searches for duplicates based on those values.

Record ID and Field Map

`findDuplicates()` searches the object defined by the duplicate rule for an existing record that has the same ID. It loads any values from that record that aren't specified in the map, and then loads values from the map. Based on the resulting union of values, `findDuplicates()` searches for duplicates.

The output of `findDuplicates()` is an array of FindDuplicatesResult objects with the same number of elements as the input array, and in the same order. The output objects encapsulate record IDs for duplicate records, if any. Optionally, the output objects also contain values from the duplicate records.

Each FindDuplicatesResult element contains a DuplicateResult object. If `findDuplicates()` doesn't find any duplicates for an sObject, the `duplicateRule` field in DuplicateResult contains the name of the duplicate rule that `findDuplicates()` applied, but the `matchResults` array is empty.

If the `includeRecordDetails` flag in DuplicateRuleHeader is set to `false`, `findDuplicates()` only returns the record IDs of the matching records. Otherwise, `findDuplicates()` returns all the fields specified in the primary CompactLayout associated with the target object.

Basic Steps for Using

1. Create one or more sObject objects with a type that corresponds to the object that has the duplicate rules you want to use.
2. In each sObject, specify record IDs or field maps (or both) to compare to records in the object.
3. Set DuplicateRuleHeader to control the output you want.

Sample

The following Java sample demonstrates how to search for duplicates of a Lead, using the standard Leads duplicate rule.

```
package wsc;

import com.sforce.soap.partner.*;
import com.sforce.soap.partner.Error;
import com.sforce.soap.partner.sobject.SObject;
import com.sforce.ws.ConnectionException;
import com.sforce.ws.ConnectorConfig;

public class Main {

  private static final String USERNAME = "YOUR-USERNAME";
  private static final String PASSWORD = "YOUR-PASSWORD&SECURITY-TOKEN";
  private static PartnerConnection connection = null;

  public static void main(String[] args) throws ConnectionException {

    // Create the configuration for the partner connection
    ConnectorConfig config = new ConnectorConfig();
    config.setUsername(USERNAME);
    config.setPassword(PASSWORD);

    // Initialize the connection
    connection = new PartnerConnection(config);

    SObject[] inputSObjectArray = new SObject[1];
    // Instantiate an empty Java SObject
    SObject searchCriteria = new SObject();
    // Set its type to Lead. This tells findDuplicates() to use the duplicate rules
    // for Lead
    searchCriteria.setType("Lead");
    /*
     * Set the necessary fields for matching, based on the standard matching rules for
Lead (Search
     * help.salesforce.com for "Standard Contact and Lead Matching Rule" to see the rules).

     */
    searchCriteria.setField("FirstName", "Marc");
    searchCriteria.setField("LastName", "Benioff");
    searchCriteria.setField("Company", "Salesforce.com Inc");
    searchCriteria.setField("Title", "CEO");
    searchCriteria.setField("Email", "ceo@salesforce.com");
    // Add the sObject to the input array
    inputSObjectArray[0] = searchCriteria;
    /*
     * By default, findDuplicates() returns only record IDs. To return additional values,
 set the second parameter
     * to true.
     */
    connection.setDuplicateRuleHeader(
        /*
         * @param allowSave - Not Applicable for this API call
```

```
         */
        false,
        /* @param includeRecordDetails */
        false,
        /*
         * @param runAsCurrentUser - Not Applicable for this API call
         */
        false);

    // Invoke findDuplicates() to find duplicates based on the information in the
    // SObject array
    FindDuplicatesResult[] callResults = connection.findDuplicates(inputSObjectArray);

    // Iterate through the results
    // For each SObject in the input array, get the duplicate results
    for (FindDuplicatesResult findDupeResult : callResults) {
      // If errors were found for this SObject, print them out
      if (!findDupeResult.isSuccess()) {
        for (Error findDupError : findDupeResult.getErrors()) {
          System.out.println("FindDuplicatesRule errors detected: " +
findDupError.getMessage());
        }
      } else {
        /*
         * Get the DuplicateResult object array for the result. Each element in the array
 represents the result
         * of testing one duplicate rule for the SObject. Process each DuplicateResult.
         */
        for (DuplicateResult dupeResult : findDupeResult.getDuplicateResults()) {
          System.out.println("Duplicate rule: " + dupeResult.getDuplicateRule());
          // Print out the name of the object associated with the duplicate
          // rule
          System.out.println("Source of this duplicate rule is: " +
dupeResult.getDuplicateRuleEntityType());
          for (MatchResult matchResult : dupeResult.getMatchResults()) {
            if (!matchResult.isSuccess()) {
              for (Error e : matchResult.getErrors()) {
                System.out.println("Errors detected: " + e.getMessage());
              }
            } else {
              System.out.println("Matching rule is: " + matchResult.getRule());
              System.out.println("Object type for this matching rule is: " +
matchResult.getEntityType());
              for (MatchRecord matchRecord : matchResult.getMatchRecords()) {
                System.out.println("Duplicate record ID: " +
matchRecord.getRecord().getId());
              }
            }
          }
        }
      }
    }
  }
}
```

Arguments

Name	Type	Description
`sObjects`	Array of sObject	Required. A list of sObject objects that contain values you want to search for.

Response

An array of `FindDuplicatesResult` objects.

FindDuplicatesResult

Represents the result of a duplicate search for a single sObject in the input array. Because the object associated with the sObject can have more than one duplicate rule, `FindDuplicatesResult` contains an array of DuplicateResult objects.

Fields

Field Name	Field Type	Description
`duplicateResults`	Array of `DuplicateResult` objects	The result of each duplicate rule applied by `findDuplicates()` to a single sObject.
`errors`	Array of Error objects	Contains an array of errors encountered by `findDuplicates()`.
`success`	boolean	This field is set to `true` if the `findDuplicates()` doesn't encounter any errors.

Faults

`InvalidSObjectFault`

`UnexpectedErrorFault`

`InvalidFieldFault`

`findDuplicatesByIds()`

Performs rule-based searches for duplicate records. The input is an array of IDs, each of which specifies the records for which to search for duplicates. The output identifies the detected duplicates for each object that supplies the duplicate rules. `findDuplicatesByIds()` applies the rules to the record IDs to do the search. The output identifies the detected duplicates for each ID.

Syntax

```
FindDuplicatesResult[] duplicateResults =
    connection.findDuplicatesByIds(Id[] inputIdArray);
```

Usage

Use `findDuplicatesByIds()` to apply duplicate rules associated with an object to records represented by the record IDs.

`findDuplicatesByIds()` uses the duplicate rules for the object that has the same type as the input record IDs. For example, if the record ID represents an Account, `findDuplicatesByIds()` uses the duplicate rules associated with the Account object.

Note:

- All record IDs in the input array must have the same object type, and that type must correspond to an object type that supports duplicate rules.
- The input array is limited to 50 elements. If you exceed this limit, the SOAP call returns an API Fault Element containing the following fields:
  - ExceptionCode: `LIMIT_EXCEEDED`
  - exceptionMessage: `Configuration error: The number of records to check is greater than the permitted batch size.`

For each input ID, `findDuplicatesByIds()` adds an object to the output array.

Matching is controlled by the values specified by the input record ID. The values can include a record ID only.

`findDuplicatesByIds()` searches the object defined by the duplicate rule for an existing record that has the same ID. Then it loads the values from that record, and searches for duplicates based on those values.

The output of `findDuplicatesByIds()` is an array of objects with the same number of elements as the input array, and in the same order. The output objects encapsulate record IDs for duplicate records. Optionally, the output objects also contain values from the duplicate records.

Each element contains a DuplicateResult object. If `findDuplicatesByIds()` doesn't find any duplicates for an sObject, the `duplicateRule` field in DuplicateResult contains the name of the duplicate rule that `findDuplicatesByIds()` applied, but the `matchResults` array is empty.

If the `includeRecordDetails` flag in DuplicateRuleHeader is set to `false`, `findDuplicatesByIds()` returns only the record IDs of the matching records. Otherwise, `findDuplicatesByIds()` returns all the fields specified in the primary CompactLayout associated with the target object.

Basic Steps for Using

1. Create one or more ID objects that correspond to the object that has the duplicate rules you want to use.
2. Specify record IDs to compare to records in the object.
3. Set DuplicateRuleHeader to control the output you want.

Sample

The following Java sample demonstrates how to search for duplicates of a Lead, using the standard Leads duplicate rule.

```
package wsc;

import com.sforce.soap.partner.*;
import com.sforce.soap.partner.Error;
import com.sforce.soap.partner.sobject.SObject;
import com.sforce.ws.ConnectionException;
import com.sforce.ws.ConnectorConfig;

public class Main {

  private static final String USERNAME = "YOUR-USERNAME";
  private static final String PASSWORD = "YOUR-PASSWORD&SECURITY-TOKEN";
  private static PartnerConnection connection = null;

  public static void main(String[] args) throws ConnectionException {

    // Create the configuration for the partner connection
    ConnectorConfig config = new ConnectorConfig();
    config.setUsername(USERNAME);
    config.setPassword(PASSWORD);

    // Initialize the connection
    connection = new PartnerConnection(config);

    SObject[] objectsToSearch = new SObject[2];
    String[] inputIds = new String[2];
    // Instantiate an empty Java SObject
    SObject searchCriteria = new SObject();
    // Set its type to Lead. This tells findDuplicatesByIds() to use the duplicate rules
    // for Lead
    searchCriteria.setType("Lead");
    /*
     * Set the necessary fields for matching, based on the standard matching rules for
Lead
     * (Search help.salesforce.com for "Standard Contact and Lead Matching Rule" to see
the
     * rules).
     */
    searchCriteria.setField("FirstName", "Marc");
    searchCriteria.setField("LastName", "Benioff");
    searchCriteria.setField("Company", "Salesforce.com Inc");
    searchCriteria.setField("Title", "CEO");
    searchCriteria.setField("Email", "ceo@salesforce.com");
    // Add the sObjects to the input array
    objectsToSearch[0] = searchCriteria;
    objectsToSearch[1] = searchCriteria;

    SaveResult[] saveResults = connection.create(objectsToSearch);

    for (int i = 0; i < saveResults.length; ++i) {
      if (saveResults[i].isSuccess()) {
```

```
        System.out.println("Successfully created ID: " + saveResults[i].getId());
        inputIds[i] = saveResults[i].getId();
      } else {
        System.out.println("Error: could not create SObject.");
        System.out.println("The error reported was: " +
          saveResults[i].getErrors()[0].getMessage() + "\n");
      }
    }
    /*
     * By default, findDuplicatesByIds() returns only record IDs. To return additional
values,
     * set the second parameter to true.
     */
    connection.setDuplicateRuleHeader(
        /*
         * @param allowSave - Not Applicable for this API call
         */
        false,
        /* @param includeRecordDetails */
        false,
        /*
         * @param runAsCurrentUser - Not Applicable for this API call
         */
        false);

    // Invoke findDuplicatesByIds() to find duplicates based on the information in the
    // SObject array
    FindDuplicatesResult[] callResults = connection.findDuplicatesByIds(inputIds);

    // Iterate through the results
    /* For each Id in the input array, get the duplicate results. There could be more
matches
     * depending on the data in the organization.
     */
    for (FindDuplicatesResult findDupeResult : callResults) {
      // If errors were found for this Id, print them out
      if (!findDupeResult.isSuccess()) {
        for (Error findDupError : findDupeResult.getErrors()) {
          System.out.println("FindDuplicatesRule errors detected: " +
findDupError.getMessage());
        }
      } else {
        /*
         * Get the DuplicateResult object array for the result. Each element in the array
 represents
        * the result of testing one duplicate rule for the Id. Process each DuplicateResult.

         */
        for (DuplicateResult dupeResult : findDupeResult.getDuplicateResults()) {
          System.out.println("Duplicate rule: " + dupeResult.getDuplicateRule());
          // Print out the name of the object associated with the duplicate
          // rule
          System.out.println("Source of this duplicate rule is: " +
            dupeResult.getDuplicateRuleEntityType());
```

```
          for (MatchResult matchResult : dupeResult.getMatchResults()) {
            if (!matchResult.isSuccess()) {
              for (Error e : matchResult.getErrors()) {
                System.out.println("Errors detected: " + e.getMessage());
              }
            } else {
              System.out.println("Matching rule is: " + matchResult.getRule());
              System.out.println("Object type for this matching rule is: " +
matchResult.getEntityType());
              for (MatchRecord matchRecord : matchResult.getMatchRecords()) {
                System.out.println("Duplicate record ID: " +
matchRecord.getRecord().getId());
              }
            }
          }
        }
      }
    }
  }
}
```

Arguments

Name	Type	Description
`IDs`	Array of ID	Required. A list of IDs that contain values you want to search for.

Response

An array of `FindDuplicatesResult` objects.

FindDuplicatesResult

Represents the result of a duplicate search for a single ID in the input array. Because the object associated with the sObject can have more than one duplicate rule, `FindDuplicatesResult` contains an array of DuplicateResult objects.

Fields

Field Name	Field Type	Description
`duplicateResults`	Array of `DuplicateResult` objects	The result of each duplicate rule applied by `findDuplicatesByIds()` to a single sObject.
`errors`	Array of Error objects	Contains an array of errors encountered by `findDuplicatesByIds()`.

Field Name	Field Type	Description
`success`	boolean	This field is set to `true` if `findDuplicatesByIds()` doesn't encounter any errors.

Faults

`InvalidSObjectFault`

`UnexpectedErrorFault`

`InvalidFieldFault`

getDeleted()

Retrieves the list of individual records that have been deleted within the given timespan for the specified object.

Syntax

```
GetDeletedResult = connection.getDeleted(string sObjectType, dateTime startDate, dateTime
 EndDate);
```

Usage

Use `getDeleted()` for data replication applications to retrieve a list of records that have been deleted from your organization's data within the specified timespan. The `getDeleted()` call retrieves a GetDeletedResult object that contains an array of `DeletedRecord` objects containing the ID of each deleted record and the date/time (Coordinated Universal Time (UTC) time zone) on which it was deleted, using information from the `SystemModstamp` system field if available. Be sure to read Data Replication before using `getDeleted()` in your client applications. (For information on IDs, see ID Field Type.)

As of release 8.0, the `getDeleted()` call respects the user's sharing model.

Rules and Guidelines

When replicating deleted records, consider the following rules and guidelines:

- The specified `startDate` must chronologically precede the specified `endDate` value by more than one minute. The specified `startDate` cannot be the same value as, or later than, the specified `endDate` value. Otherwise, the API returns an `INVALID_REPLICATION_DATE` error.
- Records are returned only if the user has access to them.
- Results are returned for no more than 15 days previous to the day the call is executed (or earlier if an administrator has purged the Recycle Bin). If the purge has been performed before your `getDeleted()` call is executed, an `INVALID_REPLICATION_DATE` error is returned.
- If latestDateCovered is less than `endDate`, the call will fail, returning an `INVALID_REPLICATION_DATE` error with the value of latestDateCovered.
- Deleted records are written to a delete log, which `getDeleted()` accesses. A background process that runs every two hours purges records that have been in an organization's delete log for more than two hours if the number of records is above a certain

limit. Starting with the oldest records, the process purges delete log entries until the delete log is back below the limit. This is done to protect Salesforce from performance issues related to massive delete logs. The limit is calculated using this formula:

```
5000 * number of licenses in the organization
```

For example, an organization with 1,000 licenses could have up to 5,000,000 (five million) records in the delete log before any purging took place. If purging has been performed before your `getDeleted()` call is executed, an `INVALID_REPLICATION_DATE` error is returned. If you get this exception, you should do a full pull of the table.

- If you delete a large numbers of records, your data replication should run more frequently than every two hours to ensure all records are returned by `getDeleted()`.
- Client applications typically poll for changed data periodically. For important polling considerations, see Polling for Changes.
- Records for certain objects cannot be replicated via the API. To replicate a record via the `getDeleted()` call, its object must be configured as replicateable (`replicateable` is `true`). To determine whether a given object can be replicated, your client application can invoke the `describeSObjects()` call on the object and inspect its `replicateable` property.
- Development tools differ in the way that they handle time data. Some development tools report the local time, while others report only the Coordinated Universal Time (UTC) time. To determine how your development tool handles time values, refer to its documentation.
- If you call `getDeleted()` for a history object, the call returns the records deleted during the given date range for all history objects, not only the history object you specified. For example, if you call `getDeleted()` for AccountHistory, you'll get records deleted during the given date range for AccountHistory, ContactHistorfy, and so on. However, `getDeleted()` calls on OpportunityHistory return only deleted OpportunityHistory records, not other associated deleted history objects.

Basic Steps for Replicating Deleted Records

You can replicate deleted records using the following basic steps for each object:

1. Optionally, determine whether the structure of the object has changed since the last replication request, as described in Checking for Structural Changes in the Object.
2. Call `getDeleted()`, passing in the object and the relevant time span for deleted records.
3. In the DeleteResult object, iterate through the returned array of `DeletedRecord` objects containing the ID of each deleted record and the date on which it was deleted (Coordinated Universal Time (UTC) time zone).
4. Take the appropriate action on the local data to remove the deleted records or flag as deleted.
5. Optionally, save the request time span for future reference. You should save the value of latestDateCovered.

A client application likely performs other tasks associated with data replication operations. For example, if an opportunity is closed, a client application might run a new revenue report. Similarly, if a task is completed, the process might log this in another system.

Sample Code—Java

This sample calls `getDeleted()` to get all accounts that were deleted in the last 60 minutes. It then writes the ID and the deleted date of each returned account to the console.

```
public void getDeletedRecords() {
   try {
      GregorianCalendar endTime = (GregorianCalendar)
         connection.getServerTimestamp().getTimestamp();
      GregorianCalendar startTime = (GregorianCalendar) endTime.clone();
      // Subtract 60 minutes from the server time so that we have
      // a valid time frame.
```

```
        startTime.add(GregorianCalendar.MINUTE, -60);
        System.out.println("Checking deletes at or after: "
              + startTime.getTime().toString());

        // Get records deleted during the specified time frame.
        GetDeletedResult gdResult = connection.getDeleted("Account",
              startTime, endTime);

        // Check the number of records contained in the results,
        // to check if something was deleted in the 60 minute span.
        DeletedRecord[] deletedRecords = gdResult.getDeletedRecords();
        if (deletedRecords != null && deletedRecords.length > 0) {
           for (int i = 0; i < deletedRecords.length; i++) {
              DeletedRecord dr = deletedRecords[i];
              System.out.println(dr.getId() + " was deleted on "
                    + dr.getDeletedDate().getTime().toString());
           }
        } else {
           System.out.println("No deletions of Account records in "
                 + "the last 60 minutes.");
        }
     } catch (ConnectionException ce) {
        ce.printStackTrace();
     }
}
```

Sample Code—C#

This sample calls `getDeleted()` to get all accounts that were deleted in the last 60 minutes. It then writes the ID and the deleted date of each returned account to the console.

```
public void getDeletedRecords()
{
   try
   {
      DateTime endTime = binding.getServerTimestamp().timestamp;
      // Subtract 60 minutes from the server time so that we have
      // a valid time frame.
      DateTime startTime = endTime.AddMinutes(-60);
      Console.WriteLine("Checking deletes at or after: "
            + startTime.ToLocalTime().ToString());

      // Get records deleted during the specified time frame.
      GetDeletedResult gdResult = binding.getDeleted("Account",
            startTime, endTime);

      // Check the number of records contained in the results,
      // to check if something was deleted in the 60 minute span.
      DeletedRecord[] deletedRecords = gdResult.deletedRecords;
      if (deletedRecords != null && deletedRecords.Length > 0)
      {
         for (int i = 0; i < deletedRecords.Length; i++)
         {
```

```
            DeletedRecord dr = deletedRecords[i];
            Console.WriteLine(dr.id + " was deleted on "
                  + dr.deletedDate.ToLocalTime().ToString());
         }
      }
      else
      {
         Console.WriteLine("No deletions of Account records in "
               + "the last 60 minutes.");
      }
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                                          e.Message + "\n" + e.StackTrace);
   }
}
```

Arguments

Name	Type	Description
sObjectTypeEntityType	string	Object type. The specified value must be a valid object for your organization. See sObject.
startDate	dateTime	Starting date/time (Coordinated Universal Time (UTC)—not local— timezone) of the timespan for which to retrieve the data. The API ignores the seconds portion of the specified dateTime value (for example, 12:30:15 is interpreted as 12:30:00 UTC).
endDate	dateTime	Ending date/time (Coordinated Universal Time (UTC)—not local— timezone) of the timespan for which to retrieve the data. The API ignores the seconds portion of the specified dateTime value (for example, 12:35:15 is interpreted as 12:35:00 UTC).

Limits

There are record limits on the result GetDeletedResult:

- If your `getDeleted()` call returns more than 600,000 records and the user is a system administrator, an exception EXCEEDED_ID_LIMIT is returned.
- If your `getDeleted()` call returns more than 20,000 records and the user is not a system administrator, an exception OPERATION_TOO_LARGE is returned. Note that this error is returned when more than 20,000 records across the organization have been deleted, not just the records viewable by the user.

You can correct the error by choosing start and end dates that are closer together.

Response

GetDeletedResult

Faults

InvalidSObjectFault

UnexpectedErrorFault

SEE ALSO:

Data Replication

API Call Basics

https://developer.salesforce.com/page/Sample_SOAP_Messages-create

GetDeletedResult

The getDeleted() call returns a GetDeletedResult object that contains an array of DeletedRecord records and two properties:

Name	Type	Description
earliestDateAvailable	dateTime	For the object type of the getDeleted() call, the timestamp (Coordinated Universal Time (UTC)—not local— timezone) of the last physically deleted object. If this value is less than endDate, the call will fail, and you should resynch your data before performing another replication.
deletedRecords[]	deletedRecords	Array of the deleted records which satisfy the start and end dates specified in the getDeleted() call.
latestDateCovered	dateTime	The timestamp (Coordinated Universal Time (UTC)—not local— time zone) of the last date covered in the getDeleted() call. If there is a value, it is less than or equal to endDate. A value here indicates that, for safety, you should use this value for the startDate of your next call to capture the changes that started after this date but did not complete before endDate and were, therefore, not returned in the previous call.

deletedRecords

The GetDeletedResult contains and array of deletedRecords, which contain the following properties:

Name	Type	Description
deletedDate	dateTime	Date and time (Coordinated Universal Time (UTC)—not local—timezone) when this record was deleted. This information is obtained using the SystemModstamp system field if available.
id	ID	ID of an sObject that has been deleted.

getUpdated()

Retrieves the list of individual records that have been updated (added or changed) within the given timespan for the specified object.

Syntax

```
GetUpdatedResult[] = connection.getUpdated(string sObjectType, dateTime startDate, dateTime
 EndDate);
```

Usage

Use `getUpdated()` for data replication applications to retrieve a set of IDs for objects of the specified object that have been created or updated within the specified timespan. The `getUpdated()` call retrieves an array of `GetUpdatedResult` objects containing the ID of each created or updated object and the date/time (Coordinated Universal Time (UTC) time zone) on which it was created or updated, respectively. Be sure to read Data Replication before using `getUpdated()` in your client application.

Note: The `getUpdated()` call retrieves the IDs only for objects to which the logged-in user has access.

Rules and Guidelines

When replicating created and updated objects, consider the following rules and guidelines:

- The specified `startDate` must chronologically precede the specified `endDate` value. The specified `startDate` cannot be the same value as, or later than, the specified `endDate` value. Otherwise, the API returns an `INVALID_REPLICATION_DATE` error.
- Results are returned for no more than 30 days previous to the day the call is executed.
- Client applications typically poll for changed data periodically. For important polling considerations, see Polling for Changes.
- Your client application can replicate any objects to which it has sufficient permissions. For example, to replicate all data for your organization, your client application must be logged in with "View All Data" access rights to the specified object. Similarly, the objects must be within your sharing rules. For more information, see Factors that Affect Data Access.
- Certain objects cannot be replicated via the API. To replicate an object via the `getUpdated()` call, its object must be configured as replicateable (`replicateable` is `true`). To determine whether a given object can be replicated, your client application can invoke the `describeSObjects()` call on the object and inspect its `replicateable` property.
- Certain objects cannot be deleted, such as Group, User, Contract, or Product2 objects. However, if instances of these objects are no longer visible in the Salesforce user interface, they may have been rendered inactive so that only users with administrative access can see them. To determine whether a missing object instance has been made inactive, your client application can call `getUpdated()` and check the object's active flag.
- Development tools differ in the way that they handle time data. Some development tools report the local time, while others report only the Coordinated Universal Time (UTC) time. To determine how your development tool handles time values, refer to its documentation.

Basic Steps for Replicating Updated Objects

Replicating objects involves the following basic steps for each object that you want to replicate:

1. Optionally, the client application determines whether the structure of the object has changed since the last replication request, as described in Checking for Structural Changes in the Object.
2. Call `getUpdated()`, passing in the object and timespan for which to retrieve data.
3. Iterate through the returned array of IDs. For each ID element in the array, call `retrieve()` to obtain the latest information you want from the associated object. Your client application must then take the appropriate action on the local data, such as inserting new rows or updating existing ones with the latest information.

4. Optionally, the client application saves the request timestamp for future reference.

A client application likely performs other tasks associated with data replication operations. For example, if an opportunity were to become closed, a client application might run a new revenue report. Similarly, if a task were completed, the process might log this somehow in another system.

Sample Code—Java

This sample gets the accounts that were updated in the last 60 minutes and writes their IDs to the console.

```
public void getUpdatedRecords() {
   try {
      GregorianCalendar endTime = (GregorianCalendar) connection
            .getServerTimestamp().getTimestamp();
      GregorianCalendar startTime = (GregorianCalendar) endTime.clone();
      // Subtract 60 minutes from the server time so that we have
      // a valid time frame.
      startTime.add(GregorianCalendar.MINUTE, -60);
      System.out.println("Checking updates as of: "
            + startTime.getTime().toString());

      // Get the updated accounts within the specified time frame
      GetUpdatedResult ur = connection.getUpdated("Account", startTime,
            endTime);
      System.out.println("GetUpdateResult: " + ur.getIds().length);

      // Write the results
      if (ur.getIds() != null && ur.getIds().length > 0) {
         for (int i = 0; i < ur.getIds().length; i++) {
            System.out.println(ur.getIds()[i] + " was updated between "
                  + startTime.getTime().toString() + " and "
                  + endTime.getTime().toString());
         }
      } else {
         System.out.println("No updates to accounts in "
               + "the last 60 minutes.");
      }
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Sample Code—C#

This sample gets the accounts that were updated in the last 60 minutes and writes their IDs to the console.

```
public void getUpdatedRecords()
{
   try
   {
      DateTime endTime = binding.getServerTimestamp().timestamp;
      // Subtract 60 minutes from the server time so that we have
      // a valid time frame.
```

```
      DateTime startTime = endTime.AddMinutes(-60);
      Console.WriteLine("Checking updates as of: "
            + startTime.ToLocalTime().ToString());

      // Get the updated accounts within the specified time frame
      GetUpdatedResult ur = binding.getUpdated("Account", startTime,
            endTime);
      Console.WriteLine("GetUpdateResult: " + ur.ids.Length);

      // Write the results
      if (ur.ids != null && ur.ids.Length > 0)
      {
         for (int i = 0; i < ur.ids.Length; i++)
         {
            Console.WriteLine(ur.ids[i] + " was updated between "
                  + startTime.ToLocalTime().ToString() + " and "
                  + endTime.ToLocalTime().ToString());
         }
      }
      else
      {
         Console.WriteLine("No updates to accounts in "
               + "the last 60 minutes.");
      }
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                                e.Message + "\n" + e.StackTrace);
   }
}
```

Arguments

Name	Type	Description
sObjectTypeEntityType	string	Object type. The specified value must be a valid object for your organization. For a list of standard objects, see Standard Objects.
startDate	dateTime	Starting date/time (Coordinated Universal Time (UTC) time zone—not local—timezone) of the timespan for which to retrieve the data. The API ignores the seconds portion of the specified dateTime value (for example, 12:30:15 is interpreted as 12:30:00 UTC).
endDate	dateTime	Ending date/time (Coordinated Universal Time (UTC) time zone—not local— timezone) of the timespan for which to retrieve the data. The API ignores the seconds portion of the specified dateTime value (for example, 12:35:15 is interpreted as 12:35:00 UTC).

Important: There is a limit of 600,000 IDs in the result GetUpdatedResult[]. If your `getUpdated()` call returns more than 600,000 IDs, an exception EXCEEDED_ID_LIMIT is returned. You can correct the error by choosing start and end dates that are closer together.

Response

GetUpdatedResult[]

Faults

`InvalidSObjectFault`

`UnexpectedErrorFault`

SEE ALSO:

Data Replication

API Call Basics

https://developer.salesforce.com/page/Sample_SOAP_Messages-create

GetUpdatedResult

The `getUpdated()` call returns a `GetUpdatedResult` object that contains information about each record that was inserted or updated within the given timespan. An `GetUpdatedResult` object has the following properties:

Name	Type	Description
`id[]`	ID	Array of IDs of each object that has been updated.
`latestDateCovered`	dateTime	The timestamp (Coordinated Universal Time (UTC)—not local— time zone) of the last date covered in the `getUpdated()` call. If there is a value, it is less than or equal to `endDate`. A value here indicates that, for safety, you should use this value for the `startDate` of your next call to capture the changes that started after this date but did not complete before the `endDate` and were, therefore, not returned in the previous call. Note: If Salesforce executes a long-running transaction on your instance, the value in this field is the start time of that long-running transaction until it completes. This is because a long-running transaction might affect your user data (for example, batch processing).

`invalidateSessions()`

Ends one or more sessions specified by a `sessionId`.

Syntax

```
InvalidateSessionsResult = connection.invalidateSessions(string[] sessionIds);
```

Usage

Use this call to end one or more sessions.

You can also use `logout()` to end just one session, the session of the logged-in user.

Sample Code—Java

This sample invalidates a set of sessions. The method in this sample takes an array of session IDs passed in as String values. The method then calls `invalidateSessions()` with this array and then checks the results for any errors.

```
public void invalidateSessionsSample(String[] sessionIds) {
   try {
      InvalidateSessionsResult[] results;
      results = connection.invalidateSessions(sessionIds);
      for (InvalidateSessionsResult result : results) {
         // Check results for errors
         if (!result.isSuccess()) {
            if (result.getErrors().length > 0) {
               System.out.println("Status code: "
                     + result.getErrors()[0].getStatusCode());
               System.out.println("Error message: "
                     + result.getErrors()[0].getMessage());
            }
         } else {
            System.out.println("Success.");
         }
      }
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Sample Code—C#

This sample invalidates a set of sessions. The method in this sample takes an array of session IDs passed in as String values. The method then calls `invalidateSessions()` with this array and then checks the results for any errors.

```
public void invalidateSessionsSample(string[] sessionIds)
{
   try
   {
      InvalidateSessionsResult[] results;
      results = binding.invalidateSessions(sessionIds);
      foreach (InvalidateSessionsResult result in results)
      {
         // Check results for errors
         if (!result.success)
         {
            if (result.errors.Length > 0)
            {
               Console.WriteLine("Status code: " +
                  result.errors[0].statusCode);
```

```
                Console.WriteLine("Error message: " +
                   result.errors[0].message);
             }
          }
          else
          {
             Console.WriteLine("Success.");
          }
       }
    }
    catch (SoapException e)
    {
       Console.WriteLine("An unexpected error has occurred: " +
                                   e.Message + "\n" + e.StackTrace);
    }
}
```

Arguments

Name	Type	Description
sessionIds	string[]	One or more sessionId strings. Limit 200. You can obtain your sessionId from the SessionHeader.

Response

InvalidateSessionsResult[]

Faults

UnexpectedErrorFault

InvalidateSessionsResult

The invalidateSessions() call returns an array of LogoutResult objects. Each object has the following properties:

Name	Type	Description
success	boolean	Indicates whether the session was successfully terminated (true) or not (false).
errors	Error[]	If an error occurred during the call, an array of one or more Error objects. Each object contains an error code and description.

login()

Logs in to the login server and starts a client session.

Note: `login()` calls count toward your login rate limit.

Syntax

```
LoginResult = connection.login(string username, string password);
```

Usage

Use the `login()` call to log in to the login server and start a client session. The client app logs in and obtains a `sessionId` and server URL before making other API calls.

When a client app invokes the `login()` call, it passes in a username and password as credentials. Upon invocation, the API authenticates the credentials . It then returns the `sessionId`, the user ID associated with the logged-in username, and a URL that points to the Lightning Platform API to use in all subsequent API calls.

Salesforce checks the IP address from which the client app is logging in and blocks logins from unknown IP addresses. If the API blocks the login, Salesforce returns a login fault. To log in, the user must add the security token at the end of the user's password. For example, if a user's password is *mypassword* and the security token is *XXXXXXXXXX*, the user enters *mypasswordXXXXXXXXXX*. Users get their security token by changing their password or resetting their security token from the Salesforce user interface. When users change their password or reset their security token, Salesforce sends a new security token to the email address on the user's Salesforce record. The security token is valid until the user resets the security token, or changes the password, or you reset the user's password. When the security token is invalid, the user must repeat the login process. To avoid another log in, add the client's IP address to the org's list of trusted IP addresses. For more information, see Security Token.

After logging in, make sure that your client app performs these tasks.

- Sets the session ID in the SOAP header so that the API can validate subsequent requests for this session.
- Specifies the server URL as the target for subsequent service requests. The login server supports only login calls.

Development tools differ in the way you specify session headers and server URLs. For more information, see the documentation for your particular development tool.

Note: Multiple client apps can log in using the same `username` argument. However, this approach increases your risk of getting errors due to query limits. A user can have up to 10 query cursors open at a time. If 10 `QueryLocator` cursors are open when a client application, logged in as the same user, attempts to open a new one, then the oldest of the 10 cursors is released. If the client application attempts to open the released query cursor, an error results.

The limit is 3,600 calls to `login()` per user per hour. Exceeding this limit results in a "Login Rate Exceeded" error. After reaching the hourly limit, Salesforce blocks the user from logging in. Users can try to log in again an hour after the block occurred.

Enterprise and Partner Endpoints

In API version 11.1 and earlier, client apps built with the partner WSDL can send requests to the enterprise endpoint, and enterprise WSDL apps can send requests to the partner endpoint. Beginning with version 12.0, this functionality is not supported.

Sandbox Endpoints

If you're logging in to a sandbox org, use an endpoint based on `test.salesforce.com` instead of `login.salesforce.com`.

Login When Using a Proxy

If you log in to Salesforce via a proxy, set the proxy host and port number on the instance of the `ConnectorConfig` class that you use to log in. If you must authenticate on the proxy, set the username and password.

```
ConnectorConfig config = new ConnectorConfig();
config.setUsername(userId);
config.setPassword(passwd);
config.setAuthEndpoint(authEndPoint);
config.setProxy(proxyHost, proxyPort);
// Set the username and password if your proxy must be authenticated
config.setProxyUsername(proxyUsername);
config.setProxyPassword(proxyPassword);
try {
   EnterpriseConnection connection = new EnterpriseConnection(config);
   // etc.
} catch (ConnectionException ce) {
  ce.printStackTrace();
}
```

Session Expiration

Client apps aren't required to explicitly log out to end a session. Sessions expire automatically after a predetermined length of inactivity. The default is two hours. If you make an API call, the inactivity timer is reset to zero. To change the session expiration (timeout) value, from Setup, enter *Session Settings* in the Quick Find box, and select **Session Settings**.

Active Self-Service Users Authentication

Note: Starting with Spring '12, the Self-Service portal isn't available for new Salesforce orgs. Existing orgs continue to have access to the Self-Service portal.

To authenticate active self-service users, use LoginScopeHeader to specify the Organization ID against which self-service users are authenticated. A self-service user must exist and be active before being authenticated (see SelfServiceUser).

Customer Community User Authentication

To authenticate an active Experience Cloud site user who has the API Enabled permission, use LoginScopeHeader to specify the Organization ID of the org with Experience Cloud sites. Site users must exist, be active, and belong to the Experience Cloud site before being authenticated.

Client apps can send login requests to these endpoints (using valid values for the authentication endpoint).

Enterprise WSDL:

- `String authEndPoint = "https://login.salesforce.com/services/Soap/c/`***`version`***`/"`
- `String authEndPoint = "https://site-domain/path-prefix/Soap/c/`***`version`***`/"`

Partner WSDL:

- `String authEndPoint = "https://login.salesforce.com/services/Soap/u/`***`version`***`/"`
- `String authEndPoint = "https://site-domain/path-prefix/Soap/u/`***`version`***`/"`

Logout

Salesforce recommends that you always call `logout()` to end a session when it's no longer needed. This call ends any child sessions. To provide the most protection, log out the user instead of waiting for the session to expire.

Sample Code—Java

This sample logs a user in with the specified username, password, and authentication endpoint URL. The sample writes user and session information to the console after a successful login. Before running this sample, replace the values for username, password, and authentication endpoint with valid values.

To learn how to generate and import the web service WSDL needed to make API calls, see Step 2: Generate or Obtain the Web Service WSDL in the Quick Start.

```
public boolean loginSample() {
   boolean success = false;
   String username = "username";
   String password = "password";
   String authEndPoint = "https://login.salesforce.com/services/Soap/c/24.0/";

   try {
      ConnectorConfig config = new ConnectorConfig();
      config.setUsername(username);
      config.setPassword(password);

      System.out.println("AuthEndPoint: " + authEndPoint);
      config.setAuthEndpoint(authEndPoint);

      connection = new EnterpriseConnection(config);

      // Print user and session info
      GetUserInfoResult userInfo = connection.getUserInfo();
      System.out.println("UserID: " + userInfo.getUserId());
      System.out.println("User Full Name: " + userInfo.getUserFullName());
      System.out.println("User Email: " + userInfo.getUserEmail());
      System.out.println();
      System.out.println("SessionID: " + config.getSessionId());
      System.out.println("Auth End Point: " + config.getAuthEndpoint());
      System.out
            .println("Service End Point: " + config.getServiceEndpoint());
      System.out.println();

      success = true;
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }

   return success;
}
```

Sample Code—C#

This sample logs a user in using the specified username and password. The result of the login call contains the service endpoint URL, which is the virtual server instance that is servicing your org, and a unique session ID. The sample sets these returned values on the binding. It sets the binding URL to the returned service endpoint. It also sets the session ID on the session header that is used on all API calls. Next, the sample writes user and session information to the console after a successful login. Before running this sample, replace the values for username and password with valid values.

To learn how to generate and import the web service WSDL needed to make API calls, see Step 2: Generate or Obtain the Web Service WSDL in the Quick Start.

```
public bool loginSample()
{
   Boolean success = false;
   string username = "username";
   string password = "password";

   // Create a service object
   binding = new SforceService();

   LoginResult lr;
   try
   {
      Console.WriteLine("\nLogging in...\n");
      lr = binding.login(username, password);

      /**
         * The login results contain the endpoint of the virtual server instance
         * that is servicing your org. Set the URL of the binding
         * to this endpoint.
         */
      // Save old authentication end point URL
      String authEndPoint = binding.Url;
      // Set returned service endpoint URL
      binding.Url = lr.serverUrl;

      /** Get the session ID from the login result and set it for the
         * session header that will be used for all subsequent calls.
         */
      binding.SessionHeaderValue = new SessionHeader();
      binding.SessionHeaderValue.sessionId = lr.sessionId;

      // Print user and session info
      GetUserInfoResult userInfo = lr.userInfo;
      Console.WriteLine("UserID: " + userInfo.userId);
      Console.WriteLine("User Full Name: " +
            userInfo.userFullName);
      Console.WriteLine("User Email: " +
            userInfo.userEmail);
      Console.WriteLine();
      Console.WriteLine("SessionID: " +
            lr.sessionId);
      Console.WriteLine("Auth End Point: " +
            authEndPoint);
      Console.WriteLine("Service End Point: " +
```

```
            lr.serverUrl);
      Console.WriteLine();

      // Return true to indicate that we are logged in, pointed
      // at the right URL and have our security token in place.
      success = true;
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                              e.Message + "\n" + e.StackTrace);
   }
   return success;
}
```

Arguments

Name	Type	Description
`username`	string	Login `username`.
`password`	string	Login password associated with the specified `username`.

The login request size is limited to 10 KB.

Response

LoginResult

Faults

`LoginFault`

`UnexpectedErrorFault`

SEE ALSO:

API Call Basics

https://developer.salesforce.com/page/Sample_SOAP_Messages-create

LoginResult

The `login()` call returns a `LoginResult` object, which has the following properties:

Name	Type	Description
`metadataServerUrl`	string	URL of the endpoint that will process subsequent metadata API calls. Your client application needs to set the endpoint.

Name	Type	Description
`passwordExpired`	boolean	Indicates whether the password used during the login attempt is expired (`true`) or not (`false`). If the password has expired, then the API returns a valid `sessionId`, but the only allowable operation is the `setPassword()` call.
`serverUrl`	string	URL of the endpoint that will process subsequent API calls. Your client application needs to set the endpoint.
`sessionId`	string	Unique ID associated with this session. Your client application needs to set this value in the session header.
`userId`	ID	ID of the user associated with the specified username and password.
`userInfo`	getUserInfoResult	User information fields. For a list of these fields, see getUserInfoResult.

`logout()`

Ends the session of the logged-in user.

Syntax

```
connection.logout();
```

Usage

This call ends the session for the logged-in user issuing the call. No arguments are needed.

To end one or more sessions started by someone other than the logged-in user, see `invalidateSessions()`.

Sample Code—Java

This sample calls `logout()` to log the current user out and writes a message to the console.

```
public void logoutSample() {
   try {
      connection.logout();
      System.out.println("Logged out.");
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Sample Code—C#

This sample calls `logout()` to log the current user out and writes a message to the console.

```
public void logoutSample()
{
```

```
    try
    {
       binding.logout();
       Console.WriteLine("Logged out.");
    }
    catch (SoapException e)
    {
       Console.WriteLine("An unexpected error has occurred: " +
                                    e.Message + "\n" + e.StackTrace);
    }
}
```

Arguments

This call uses no arguments. It ends the session for the logged-in user issuing the call, so no arguments are needed. The logged-in user is identified by the `sessionId` specified in the SessionHeader for this call.

Response

Void is returned. Because failure of the call means that the session has already been logged out, no results are needed. Any unexpected error, such as system unavailability, throws an error that should be handled by your client application.

Faults

`UnexpectedErrorFault`

`merge()`

Combines up to 3 records of the same type into 1 record. The input is an array of `MergeRequest` elements, each of which specifies the records to combine. The output is a MergeResult object that contains information about the result of the merge.

Syntax

```
MergeResult[]= connection.merge(MergeRequest[] mergeRequests);
```

Usage

Use `merge()` to combine records of the same object type into one of the records, known as the *master record*. `merge()` deletes the other records, known as the *victim records*. If a victim record has related records, `merge()` makes the master record the new parent of the related records.

Rules and Guidelines

Values from non-master records

Before you call `merge()`, decide if you want field values in the non-master records to supersede the master record values. If you do, set the field names and values in the record identified by the `masterRecord` of the `MergeRequest`.

Contacts, Leads, and Data Privacy Records

When you merge contacts or leads that have corresponding data privacy records based on the Individual object, `merge()` determines the correct data privacy record to associate with the master record.

- If you selected the option to retain the most recently updated data privacy record for merging leads and contacts, `merge()` selects the most recently updated data privacy record.
- Otherwise, `merge()` selects the data privacy record already associated with the master record.

Successive merges

Because `merge()` handles each `MergeResult` element in the input argument as a separate transaction, you can successively merge several records into the same master record.

To perform successive merges, call `merge()` with an array of `MergeResult` elements. For each `MergeResult` element, set:

- `masterRecord` to the master record ID.
- Each element in the `recordToMergeIds` array to the ID of a record you want to combine into the master.

Deleted records

Use `queryAll()` to view records that have been deleted during a merge.

List merged records

To find all records that have been merged since a given point in time, call `queryAll()` with a SELECT statement. For example:

```
SELECT Id FROM Contact WHERE isDeleted=true and masterRecordId != null
   AND SystemModstamp > 2006-01-01T23:01:01+01:00
```

Supported Object Types

The supported object types are Lead, Contact, Account, Person Account, and Individual. You can only merge objects of the same type. For example, leads can be merged only with leads.

Account Hierarchies

When you merge accounts that are part of an account hierarchy, `merge()` tries to set the victims' child records as children of the master. If this action causes a cyclical relationship, `merge()` returns an error.

Contacts Reports To relationships

When you merge contacts that have a value for the `ReportsToId` field, `merge()` tries to add the victims' `ReportsToId` value to the master. If this action causes a cyclical relationship, `merge()` reports an error.

Contacts and portal users

When you want to merge a contact victim record that has an associated portal user, set `AdditionalInformationMap` for victim record's `MergeRequest` element. You can only merge 1 victim with a portal user into the master. In Salesforce Classic, you can't merge person accounts that are enabled to use a Customer Portal.

Considerations

The following limits apply to any merge request:

- Up to 200 merge requests can be made in a single SOAP call.
- Up to three records can be merged in a single request, including the master record. This limit is the same as the limit enforced by the Salesforce user interface. To merge more than 3 records, do a successive merge.
- External ID fields cannot be used with `merge()`.
- If you selected the option to retain the most recently updated data privacy record for merging leads and contacts, but the caller does not have CRUD permission for the selected data privacy record, the merge process selects the data privacy record already associated with the master record.

Redundant relationships

You can't merge accounts or person accounts that are related to the same contact. Remove redundant account-contact relationships before you try to merge accounts.

Note: Starting with API version 15.0, if you specify a value for a field that contains a string, and the value is too big for the field, the call fails and an error is returned. In previous versions of the API the value was truncated and the call succeeded. If you wish to keep the old behavior with versions 15.0 and later, use the AllowFieldTruncationHeader SOAP header.

Sample Code—Java

This sample merges a victim account with a master account. It creates 2 accounts and attaches a note to the victim. After the merge, the code prints the ID of the victim account and the number of child records updated. In this example, the number of updated records is one, because the note of the merged account is moved to the master.

```
public Boolean mergeRecords() {
   Boolean success = false;
   // Array to hold the results
   String[] accountIds = new String[2];
   try {
      // Create two accounts to merge
      Account[] accounts = new Account[2];
      Account masterAccount = new Account();
      masterAccount.setName("MasterAccount");
      masterAccount.setDescription("The Account record to merge with.");
      accounts[0] = masterAccount;
      Account accountToMerge = new Account();
      accountToMerge.setName("AccountToMerge");
      accountToMerge
            .setDescription("The Account record that will be merged.");
      accounts[1] = accountToMerge;
      SaveResult[] saveResults = connection.create(accounts);

      if (saveResults.length > 0) {
         for (int i = 0; i < saveResults.length; i++) {
            if (saveResults[i].isSuccess()) {
               accountIds[i] = saveResults[i].getId();
               System.out.println("Created Account ID: "
                     + accountIds[i]);
            } else {
               // If any account is not created,
               // print the error returned and exit
               System.out
                     .println("An error occurred while creating account."
                           + " Error message: "
                           + saveResults[i].getErrors()[0].getMessage());
               return success;
            }
         }
      }

      // Set the Ids of the accounts
      masterAccount.setId(accountIds[0]);
      accountToMerge.setId(accountIds[1]);
```

```
      // Attach a note to the account to be merged with the master,
      // which will get re-parented after the merge
      Note note = new Note();
      System.out.println("Attaching note to record " +
            accountIds[1]);
      note.setParentId(accountIds[1]);
      note.setTitle("Merged Notes");
      note.setBody("This note will be moved to the "
            + "MasterAccount during merge");
      SaveResult[] sRes = connection.create(new SObject[] { note });
      if (sRes[0].isSuccess()) {
         System.out.println("Created Note record.");
      } else {
         Error[] errors = sRes[0].getErrors();
         System.out.println("Could not create Note record: "
               + errors[0].getMessage());
      }

      // Perform the merge
      MergeRequest mReq = new MergeRequest();
      masterAccount.setDescription("Was merged");
      mReq.setMasterRecord(masterAccount);
      mReq.setRecordToMergeIds(new String[] { saveResults[1].getId() });
      MergeResult mRes = connection.merge(new MergeRequest[] { mReq })[0];

      if (mRes.isSuccess())
      {
         System.out.println("Merge successful.");
         // Write the IDs of merged records
         for(String mergedId : mRes.getMergedRecordIds()) {
            System.out.println("Merged Record ID: " + mergedId);

         }
         // Write the updated child records. (In this case the note.)
         System.out.println(
               "Child records updated: " + mRes.getUpdatedRelatedIds().length);
         success = true;
      } else {
         System.out.println("Failed to merge records. Error message: " +
               mRes.getErrors()[0].getMessage());
      }
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
   return success;
}
```

Sample Code—C#

This sample merges a victim account with a master account. It creates 2 accounts and attaches a note to the victim. After the merge, the code prints the ID of the victim account and the number of child records updated. In this example, the number of updated records is one, because the note of the merged account is moved to the master.

```
public Boolean mergeRecords()
{
   Boolean success = false;
   // Array to hold the results
   String[] accountIds = new String[2];
   try
   {
      // Create two accounts to merge
      Account[] accounts = new Account[2];
      Account masterAccount = new Account();
      masterAccount.Name = "MasterAccount";
      masterAccount.Description = "The Account record to merge with.";
      accounts[0] = masterAccount;
      Account accountToMerge = new Account();
      accountToMerge.Name = "AccountToMerge";
      accountToMerge
            .Description = "The Account record that will be merged.";
      accounts[1] = accountToMerge;
      SaveResult[] saveResults = binding.create(accounts);

      if (saveResults.Length > 0)
      {
         for (int i = 0; i < saveResults.Length; i++)
         {
            if (saveResults[i].success)
            {
               accountIds[i] = saveResults[i].id;
               Console.WriteLine("Created Account ID: "
                     + accountIds[i]);
            }
            else
            {
               // If any account is not created,
               // print the error returned and exit
               Console.WriteLine("An error occurred while creating account."
                           + " Error message: "
                           + saveResults[i].errors[0].message);
               return success;
            }
         }
      }

      // Set the Ids of the accounts
      masterAccount.Id = accountIds[0];
      accountToMerge.Id = accountIds[1];

      // Attach a note to the account to be merged with the master,
      // which will get re-parented after the merge
```

```
      Note note = new Note();
      Console.WriteLine("Attaching note to record " +
            accountIds[1]);
      note.ParentId = accountIds[1];
      note.Title = "Merged Notes";
      note.Body = "This note will be moved to the "
            + "MasterAccount during merge";
      SaveResult[] sRes = binding.create(new sObject[] { note });
      if (sRes[0].success)
      {
         Console.WriteLine("Created Note record.");
      }
      else
      {
         Error[] errors = sRes[0].errors;
         Console.WriteLine("Could not create Note record: "
               + errors[0].message);
      }

      // Perform the merge
      MergeRequest mReq = new MergeRequest();
      masterAccount.Description = "Was merged";
      mReq.masterRecord = masterAccount;
      mReq.recordToMergeIds = new String[] { saveResults[1].id };

      MergeResult mRes = binding.merge(new MergeRequest[] { mReq })[0];

      if (mRes.success)
      {
         Console.WriteLine("Merge successful.");
         // Write the IDs of merged records
         foreach (String mergedId in mRes.mergedRecordIds)
         {
            Console.WriteLine("Merged Record ID: " + mergedId);
         }
         // Write the updated child records. (In this case the note.)
         Console.WriteLine(
               "Child records updated: " + mRes.updatedRelatedIds.Length);
         success = true;
      }
      else
      {
         Console.WriteLine("Failed to merge records. Error message: " +
               mRes.errors[0].message);
      }
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                                   e.Message + "\n" + e.StackTrace);
   }
   return success;
}
```

Arguments

This call accepts an array of MergeRequest objects. A MergeRequest object contains the following properties.

Name	Type	Description
`masterRecord`	sObject	Required. Must provide the ID of the object that other records will be merged into. Optionally, provide the fields to be updated and their values.
`recordToMergeIds`	ID[]	Required. Minimum of one, maximum of two. The other record or records to be merged into the master record.
`AdditionalInformationMap`	map	A field-value map. • Merge a portal user ID: – name: `PortalUserId` – value: ID of the portal user • In all other merge cases, set to `null`.

Response

`MergeResult[]`

Faults

`InvalidSObjectFault`

`UnexpectedErrorFault`

`InvalidIdFault`

SEE ALSO:

API Call Basics

MergeResult

The `merge()` call returns a MergeResult object, which has the following properties:

Name	Type	Description
`errors`	Error[]	If an error occurred during the `merge()` call, an array of one or more Error objects providing the error code and description.
`id`	ID	ID of the master record, the record into which the other records were merged.
`mergedRecordIds`	ID[]	ID of the records that were merged into the master record. If successful, the values match mergeRequest.`recordToMergeIds`.
`success`	boolean	Indicates whether the merge was successful (`true`) or not (`false`).

Name	Type	Description
updatedRelatedIds	ID[]	ID of all related records that were moved (reparented) as a result of the merge, and that are viewable by the user sending the merge call.

performQuickActions()

Executes quick actions of type create or update.

Syntax

```
PerformQuickActionResult[] = connection.performQuickActions(PerformQuickActionRequest
PerformQuickActionRequest[]);
```

Usage

Use the `performQuickActions()` call to perform a specific quick action. Returns an array of PerformQuickActionResult objects.

Note: In API version 46.0 and later, the `apiName` for a global quick action can include the prefix `Global.` in a `performQuickActions()` request body. The request body also accepts global quick action API names without the prefix.

Note: If you're accessing the API using a custom community URL and you use the `performQuickActions()` call to create a group, the group is only available within that community.

Note: The OutgoingEmail entity can be created only via calls from the performQuickAction API.

Sample—Java

This sample uses a quick action to create a new contact.

```
public void example() throws Exception {

    PerformQuickActionRequest req = new PerformQuickActionRequest();

    Contact con = new Contact();
    con.setLastName("Smith");

    req.setQuickActionName("Account.QuickCreateContact");
    req.setParentId("001D000000JSaHa");
/* For version 29.0 and greater, use setContextId */
    req.setRecords(new SObject[] { con });  //you can only save one record here
    PerformQuickActionResult[] pResult =
        conn.performQuickActions(new PerformQuickActionRequest[] { req } );
    for(PerformQuickActionResult pr : pResult) {
        assert pr.getSuccess();
        assert pr.getCreated();
        assert pr.getErrors().length == 0;
        System.out.println("Id of the record created: " + pr.getIds()[0]);
        System.out.println("Id of the feeditem for action performed: " +
```

```
            pr.getFeedItemIds()[0]);
    }
}
```

Arguments

Name	Type	Description
`quickActions`	PerformQuickActionRequest	The action request to perform.

PerformQuickActionRequest

Name	Type	Description
`parentOrContextId`	ID	• In API version 28.0, `parentId` is the ID of the sObject on which to create a record for the request. • In API version 29.0 and greater, `contextId` is the ID of the context on which to create a record for the request.
`quickActionName`	string	The parent or context sObject and action name—for example, Opportunity.QuickCreateOpp.
`records`	SObject[]	The record to be created. Only one record can be saved at a time.

Response

PerformQuickActionResult

PerformQuickActionResult

The `performQuickActions()` call returns an array of PerformQuickActionResult objects.

Name	Type	Description
`created`	boolean	If `true`, the record was created successfully and if `false`, no record was created.
`errors`	Error[]	If an error occurred during the call, an array of one or more Error objects providing the error information.
`feedItemIds`	ID[]	Returns an array of unique identifiers of a feed item in the form of a string with IDs; in partner portals, a type with an ID is returned.
`ids`	ID[]	An array of IDs.
`success`	boolean	If `true`, the action executed successfully and if `false`, the action failed.

Name	Type	Description
successMessage	string	Returns the message that displays to the user upon successful completion of the action.

process()

Submits an array of approval process instances for approval, or processes an array of approval process instances to be approved, rejected, or removed. For more information, see “Set Up an Approval Process” in the Salesforce Help.

Syntax

```
ProcessResult = connection.process( processType processRequest[])
```

processType can be either ProcessSubmitRequest or ProcessWorkitemRequest

Usage

Use the process() call to perform either of the following two tasks:

- Submit an array of objects to the approval process. Objects cannot already be in an approval process when submitted. Use the ProcessSubmitRequest signature.
- Process an object that has been submitted to the approval process by performing an approval action (Approve or Reject). Use the ProcessWorkitemRequest signature.

Requests are processed and a ProcessResult is returned with the same process instances as sent in the request.

The failure of a particular record will not cause failure of the entire request.

Note: Because you can fire Apex triggers with this call, you may be updating fields that contain strings.

Starting with API version 15.0, if you specify a value for a field that contains a string, and the value is too big for the field, the call fails and an error is returned. In previous versions of the API the value was truncated and the call succeeded. If you wish to keep the old behavior with versions 15.0 and later, use the AllowFieldTruncationHeader SOAP header.

Sample Code—Java

This sample accepts the ID of the sObject to process the approval for and an array containing the IDs of the next approvers. It creates a process approval request and submits it for approval. Finally, it parses the results of the process() call.

```
public void processRecords(String id, String[] approverIds) {
   ProcessSubmitRequest request = new ProcessSubmitRequest();
   request.setComments("A comment about this approval.");
   request.setObjectId(id);
   request.setNextApproverIds(approverIds);
   try {
      ProcessResult[] processResults = connection
            .process(new ProcessSubmitRequest[] { request });
      for (ProcessResult processResult : processResults) {
         if (processResult.isSuccess()) {
            System.out.println("Approval submitted for: " + id + ":");
            for (int i = 0; i < approverIds.length; i++) {
```

```
                System.out
                      .println("\tBy: " + approverIds[i] + " successful.");
             }
             System.out.println("Process Instance Status: "
                   + processResult.getInstanceStatus());
          } else {
             System.out.println("Approval submitted for: " + id
                   + ", approverIds: " + approverIds.toString() + " FAILED.");
             System.out.println("Error: "
                   + processResult.getErrors().toString());
          }
       }
    } catch (ConnectionException ce) {
       ce.printStackTrace();
    }
}
```

Sample Code—C#

This sample accepts the ID of the sObject to process the approval for and an array containing the IDs of the next approvers. It creates a process approval request and submits it for approval. Finally, it parses the results of the `process()` call.

```
public void processRecords(String id, String[] approverIds)
{
   ProcessSubmitRequest request = new ProcessSubmitRequest();
   request.comments = "A comment about this approval.";
   request.objectId = id;
   request.nextApproverIds = approverIds;
   try
   {
      ProcessResult[] processResults = binding.process(
                     new ProcessSubmitRequest[] { request });
      foreach (ProcessResult processResult in processResults)
      {
         if (processResult.success)
         {
            Console.WriteLine("Approval submitted for: " + id + ":");
            for (int i = 0; i < approverIds.Length; i++)
            {
               Console.WriteLine("\tBy: " + approverIds[i] + " successful.");
            }
            Console.WriteLine("Process Instance Status: "
                  + processResult.instanceStatus);
         }
         else
         {
            Console.WriteLine("Approval submitted for: " + id
                  + ", approverIds: " + approverIds.ToString() + " FAILED.");
            Console.WriteLine("Error: "
                  + processResult.errors.ToString());
         }
      }
   }
```

```
    catch (SoapException e)
    {
        Console.WriteLine("An unexpected error has occurred: " +
                                          e.Message + "\n" + e.StackTrace);
    }
}
```

ProcessSubmitRequest Arguments

Name	Type	Description
`comments`	string	Text that you want to accompany the submission. Don't reference merge fields or formula expressions. Submission comments appear in the approval history for the specified record. This text also appears in the initial approval request email if the template uses the `{!ApprovalRequest.Comments}` merge field.
`nextApproverIds`	ID[]	If the process requires specification of the next approval, the ID of the user to be assigned the next request.
`objectId`	ID	The record to submit for approval.
`processDefinitionNameOrId`	string	The unique name or ID of the specific approval process to which you want the record to be submitted. The process must have the same object type as the record you specified in `objectId`. Required if `skipEntryCriteria` is *true*.
`skipEntryCriteria`	boolean	If *true*, the record isn't evaluated against the entry criteria set on the process that is defined in `processDefinitionNameOrId`.
`submitterId`	ID	The ID for the user who submitted the record for approval. The user receives notifications about responses to the approval request. The user must be one of the allowed submitters for the process.

ProcessWorkitemRequest Arguments

Name	Type	Description
`action`	string	For processing an item after being submitted for approval, a string representing the kind of action to take: Approve, Reject, or Remove. Only system administrators can specify Remove. If the **Allow submitters to recall approval requests** option is selected for the approval process, the submitter can also specify Remove.
`comments`	string	Text that you want to accompany the submission. Don't reference merge fields or formula expressions. Submission comments appear in the approval history for the specified record. This text also appears in the initial approval request email if the template uses the `{!ApprovalRequest.Comments}` merge field.

Name	Type	Description
nextApproverIds	ID[]	If the process requires specification of the next approval, the ID of the user to be assigned the next request.
workitemId	ID	The ID of the ProcessInstanceWorkitem that is being approved, rejected, or removed.

Response

ProcessResult[]

Faults

ALREADY_IN_PROCESS

NO_APPLICABLE_PROCESS

SEE ALSO:

API Call Basics

ProcessResult

The `process()` call returns a ProcessResult object, which has the following properties, depending on the type of call (submit for approval or process object already submitted to for approval):

Name	Type	Description
actorIds	ID[]	IDs of the users who are currently assigned to this approval step.
entityId	ID	The object being processed.
errors	Error[]	The set of errors returned if the request failed.
instanceId	ID	The ID of the ProcessInstance associated with the object submitted for processing.
instanceStatus	string	The status of the current process instance (not an individual object but the entire process instance). The valid values are “Approved,” “Rejected,” “Removed,” or “Pending.”
newWorkItemIds	ID[]	Case-insensitive IDs that point to ProcessInstanceWorkitem items (the set of pending approval requests).
success	boolean	`true` if processing or approval completed successfully.

`query()`

Executes a query against the specified object and returns data that matches the specified criteria.

Syntax

```
QueryResult = connection.query(string queryString);
```

Usage

Use the `query()` call to retrieve data from an object. When a client application invokes the `query()` call, it passes in a query expression that specifies the object to query, the fields to retrieve, and any conditions that determine whether a given object qualifies. For an extensive discussion about the syntax and rules used for queries, see the *Salesforce SOQL and SOSL Reference Guide*.

Upon invocation, the API executes the query against the specified object, caches the results of the query on the API, and returns a query response object to the client application. The client application can then use methods on the query response object to iterate through rows in the query response and retrieve information.

Your client application must be logged in with sufficient access rights to query individual objects within the specified object and to query the fields in the specified field list. For more information, see Factors that Affect Data Access.

Certain objects cannot be queried via the API. To query an object via the `query()` call, its object must be configured as queryable. To determine whether an object can be queried, your client application can invoke the `describeSObjects()` call on the object and inspect its `queryable` property.

Tip: If you use the enterprise WSDL, you should not use `describe` to populate a select list. For example, if a system administrator adds a field to the sObject after you consume it, the `describe` call will pull down the field but your toolkit won't know how to serialize it, and your integration may fail.

You can use `queryAll()` to query on all Task and Event records, archived or not. You can also filter on the `isArchived` field to find only the archived objects. You cannot use `query()`, it automatically filters out all records where `isArchived` is set to `true`. You can insert, update, or delete archived records.

The query result object contains up to 500 rows of data by default. If the query results exceed 500 rows, then the client application uses the `queryMore()` call and a server-side cursor to retrieve additional rows in 500-row chunks. You can increase the default size up to 2,000 in the QueryOptions header. For more details see Change the Batch Size in Queries in the *SOQL and SOSL Reference*.

Queries that take longer than two minutes to process will be timed out. For timed out queries, the API returns an API fault element of `InvalidQueryLocatorFault`. If a timeout occurs, refactor your query to return or scan a smaller amount of data.

When querying for fields of type Base64 (see base64), the query response object returns only one record at a time. You cannot alter this by changing the batch size of the `query()` call.

Note: For multicurrency organizations, special handling is required when querying currency fields containing values in different currencies. For example, if a client application is querying PricebookEntry objects based on values in the `UnitPrice` field, and if the `UnitPrice` amounts are expressed in different currencies, then the query logic must handle this case correctly. For example, if the query is trying to retrieve the product codes of all products with a unit price greater than or equal to $10 USD, the query expression might look something like this:

```
SELECT Product2Id,ProductCode,UnitPrice FROM PricebookEntry
WHERE (UnitPrice >= 10 and CurrencyIsoCode='USD')
OR (UnitPrice >= 5.47 and CurrencyIsoCode='GBP')
OR (UnitPrice >= 8.19 and CurrencyIsoCode='EUR')
```

Sample Code—Java

This sample executes a query that fetches the first names and last names of all contacts. It calls `query()` with the query string to get the first batch of records. It then calls `queryMore()` in a loop to get subsequent batches of records until no records are returned. It writes the first and last names of the contacts queried to the console.

```
public void queryRecords() {
   QueryResult qResult = null;
   try {
      String soqlQuery = "SELECT FirstName, LastName FROM Contact";
      qResult = connection.query(soqlQuery);
      boolean done = false;
      if (qResult.getSize() > 0) {
         System.out.println("Logged-in user can see a total of "
            + qResult.getSize() + " contact records.");
         while (!done) {
            SObject[] records = qResult.getRecords();
            for (int i = 0; i < records.length; ++i) {
               Contact con = (Contact) records[i];
               String fName = con.getFirstName();
               String lName = con.getLastName();
               if (fName == null) {
                  System.out.println("Contact " + (i + 1) + ": " + lName);
               } else {
                  System.out.println("Contact " + (i + 1) + ": " + fName
                        + " " + lName);
               }
            }
            if (qResult.isDone()) {
               done = true;
            } else {
               qResult = connection.queryMore(qResult.getQueryLocator());
            }
         }
      } else {
         System.out.println("No records found.");
      }
      System.out.println("\nQuery succesfully executed.");
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Sample Code—C#

This sample executes a query that fetches the first names and last names of all contacts. It calls `query()` with the query string to get the first batch of records. It then calls `queryMore()` in a loop to get subsequent batches of records until no records are returned. It writes the first and last names of the contacts queried to the console.

```
public void queryRecords()
{
   QueryResult qResult = null;
   try
```

```
   {
      String soqlQuery = "SELECT FirstName, LastName FROM Contact";
      qResult = binding.query(soqlQuery);
      Boolean done = false;
      if (qResult.size > 0)
      {
         Console.WriteLine("Logged-in user can see a total of "
            + qResult.size + " contact records.");
         while (!done)
         {
            sObject[] records = qResult.records;
            for (int i = 0; i < records.Length; ++i)
            {
               Contact con = (Contact)records[i];
               String fName = con.FirstName;
               String lName = con.LastName;
               if (fName == null)
               {
                  Console.WriteLine("Contact " + (i + 1) + ": " + lName);
               }
               else
               {
                  Console.WriteLine("Contact " + (i + 1) + ": " + fName
                        + " " + lName);
               }
            }
            if (qResult.done)
            {
               done = true;
            }
            else
            {
               qResult = binding.queryMore(qResult.queryLocator);
            }
         }
      }
      else
      {
         Console.WriteLine("No records found.");
      }
      Console.WriteLine("\nQuery succesfully executed.");
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                                    e.Message + "\n" + e.StackTrace);
   }
}
```

Arguments

Name	Type	Description
queryString	string	Query string that specifies the object to query, the fields to return, and any conditions for including a specific object in the query. For more information, see the *Salesforce SOQL and SOSL Reference Guide*.

Response

QueryResult

Faults

MalformedQueryFault

InvalidSObjectFault

InvalidFieldFault

UnexpectedErrorFault

SEE ALSO:

- queryAll()
- queryMore()
- API Call Basics
- Change the Batch Size in Queries
- https://developer.salesforce.com/page/Sample_SOAP_Messages-create

QueryResult

The `query()` call returns a `QueryResult` object, which has the following properties:

Name	Type	Description
queryLocator	QueryLocator	A specialized string, similar to ID. Used in `queryMore()` for retrieving subsequent sets of objects from the query results, if applicable. Represents a server-side cursor. Each user can have up to ten query cursors open at a time.
done	boolean	Indicates whether additional rows need to be retrieved from the query results (`false`) using `queryMore()`, or not (`true`). Your client application can use this value as a loop condition while iterating through the query results.
records	sObject[]	Array of sObjects representing individual objects of the specified object and containing data defined in the field list specified in the queryString. For information on queries that use a `GROUP BY` clause, see AggregateResult.
size	int	Your client application can use this value to determine whether the query retrieved any rows (size > 0) or not (size = 0). Total number of rows retrieved in the query.

AggregateResult

This object contains the results returned by a `query()` if the query contains an aggregate function, such as `MAX()`. AggregateResult is an sObject, but unlike other sObject objects such as Contact, it is read-only and it is only used for query results.

The QueryResult object has a `records` field that is an array of sObject records matching your query. For example, the following query returns an array of Contact records in the `records` field.

```
SELECT Id, LastName
FROM Contact
WHERE FirstName = 'Bob'
```

When a SOQL query contains an aggregate function, the results are a set of aggregated data instead of an array of records for a standard object, such as Contact. Therefore, the `records` field returns an array of AggregateResult records.

For more information on aggregate functions, see “Aggregate Functions” in the *Salesforce SOQL and SOSL Reference Guide*.

Fields

Each AggregateResult object contains a separate field for each of the items in the `SELECT` list. For the enterprise WSDL, retrieve the result for each item by calling `getField()` on an AggregateResult object when using WSC client framework. For the partner WSDL, retrieve the result for each item by calling `getField()` on an sObject object.

See Sample Code—Java and Sample Code—C# for examples that work with the enterprise WSDL.

Sample Code—Java

```
public void queryAggregateResult() {
  try {
    String groupByQuery = "SELECT Account.Name n, " +
        "MAX(Amount) max, MIN(Amount) min " +
        "FROM Opportunity GROUP BY Account.Name";
    QueryResult qr = connection.query(groupByQuery);
    if (qr.getSize() > 0) {
      System.out.println("Query returned " +
          qr.getRecords().length +  " results."
      );
      for (SObject sObj : qr.getRecords()) {
        AggregateResult result = (AggregateResult) sObj;
        System.out.println("aggResult.Account.Name: " +
            result.getField("n")
        );
        System.out.println("aggResult.max: " +
            result.getField("max")
        );
        System.out.println("aggResult.min: " +
            result.getField("min")
        );
        System.out.println();
      }
    } else {
      System.out.println("No results found.");
    }
    System.out.println("\nQuery successfully executed.");
  } catch (ConnectionException ce) {
```

```
        ce.printStackTrace();
    }
}
```

Sample Code—C#

```
private void testAggregateResult()
{
   try
   {
      QueryResult qr = null;

      binding.QueryOptionsValue = new QueryOptions();

      String soqlStr = "SELECT Name, " +
                       "MAX(Amount), " +
                       "MIN(Amount) " +
                       "FROM Opportunity " +
                       "GROUP BY Name";

      qr = binding.query(soqlStr);

      if (qr.size > 0)
      {

         for (int i = 0; i < qr.records.Length; i++)
         {

               sforce.AggregateResult ar = (AggregateResult)qr.records[i];

               foreach (XmlElement e in ar.Any)
                   Console.WriteLine(
                       "{0} - {1}",
                       e.LocalName,
                       e.InnerText
                   );

         }
      }
      else
      {
         Console.WriteLine("No records found");
      }
      Console.WriteLine("Query successfully executed.");
   }
   catch (Exception ex)
   {
      Console.WriteLine(
          "\nFailed to execute query successfully." +
          "error message was: \n" +
          ex.Message
      );
```

```
    }
}
```

QueryLocator

In the QueryResult object returned by the `query()` call, `queryLocator` contains a value that you will use in the subsequent `queryMore()` call. Note the following guidelines:

- Use a given `queryLocator` value only once. When you pass it in a `queryMore()` call, the API returns a new `queryLocator` in the QueryResult.
- `QueryLocator` objects expire automatically after 15 minutes of inactivity.
- A user can have up to 10 query cursors open at a time. If 10 `QueryLocator` cursors are open when a client application, logged in as the same user, attempts to open a new one, then the oldest of the 10 cursors is released. If the client application attempts to open the released query cursor, an error results.

Note: Cursor limits for different Lightning Platform features are tracked separately. For example, you can have 10 query cursors open and 10 Metadata API cursors at the same time.

A `QueryLocator` represents a server-side cursor.

`queryAll()`

Retrieves data from specified objects, whether or not they have been deleted.

Syntax

```
QueryResult = connection.queryAll(string queryString);
```

Usage

Use `queryAll` to identify the records that have been deleted because of a merge or delete. `queryAll` has read-only access to the field `isDeleted`; otherwise it is the same as `query()`.

To find records that have been deleted (in preparation for undeleting them with the `undelete()` call), specify `isDeleted = true` in the query string, and for merged records, request the `masterRecord`. For example:

```
SELECT id, isDeleted, masterRecordId FROM Account WHERE masterRecordId='100000000000Abc'
```

You can use `queryAll()` to query on all Task and Event records, archived or not. You can also filter on the `isArchived` field to find only the archived objects. You cannot use `query()` as it automatically filters out all records where `isArchived` is set to `true`. You can update or delete archived records, though you cannot update the `isArchived` field. If you use the API to insert activities that meet the criteria listed below, the activities will be archived during the next run of the archival background process.

Because Salesforce doesn't track changes to external data, `queryAll()` behaves the same as `query()` for external objects.

For additional information about using queryAll, see `query()`.

Sample Code—Java

This sample performs a query to get all the accounts, whether they're deleted or not. It sets a custom batch size of 250 records. It fetches all batches of records by calling `queryAll()` the first time and then `queryMore()`. The names and the value of the isDeleted fields of all returned accounts are written to the console.

```
public void queryAllRecords() {
   // Setting custom batch size
   connection.setQueryOptions(250);

   try {
      String soqlQuery = "SELECT Name, IsDeleted FROM Account";
      QueryResult qr = connection.queryAll(soqlQuery);
      boolean done = false;
      if (qr.getSize() > 0) {
         System.out.println("Logged-in user can see a total of "
               + qr.getSize()
               + " contact records (including deleted records).");
         while (!done) {
            SObject[] records = qr.getRecords();
            for (int i = 0; i < records.length; i++) {
               Account account = (Account) records[i];
               boolean isDel = account.getIsDeleted();
               System.out.println("Account " + (i + 1) + ": "
                     + account.getName() + " isDeleted = "
                     + account.getIsDeleted());
            }
            if (qr.isDone()) {
               done = true;
            } else {
               qr = connection.queryMore(qr.getQueryLocator());
            }
         }
      } else {
         System.out.println("No records found.");
      }
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Sample Code—C#

This sample performs a query to get all the accounts, whether they're deleted or not. It sets a custom batch size of 250 records. It fetches all batches of records by calling `queryAll()` the first time and then `queryMore()`. The names and the value of the isDeleted fields of all returned accounts are written to the console.

```
public void queryAllRecords()
{
   // Setting custom batch size
   QueryOptions qo = new QueryOptions();
   qo.batchSize = 250;
   qo.batchSizeSpecified = true;
```

```
   binding.QueryOptionsValue = qo;

   try
   {
      String soqlQuery = "SELECT Name, IsDeleted FROM Account";
      QueryResult qr = binding.queryAll(soqlQuery);
      Boolean done = false;
      if (qr.size > 0)
      {
         Console.WriteLine("Logged-in user can see a total of "
               + qr.size
               + " contact records (including deleted records).");
         while (!done)
         {
            sObject[] records = qr.records;
            for (int i = 0; i < records.Length; i++)
            {
               Account account = (Account)records[i];
               Boolean isDel = (Boolean)account.IsDeleted;
               Console.WriteLine("Account " + (i + 1) + ": "
                     + account.Name + " isDeleted = "
                     + account.IsDeleted);
            }
            if (qr.done)
            {
               done = true;
            }
            else
            {
               qr = binding.queryMore(qr.queryLocator);
            }
         }
      }
      else
      {
         Console.WriteLine("No records found.");
      }
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                                    e.Message + "\n" + e.StackTrace);
   }
}
```

Arguments

Name	Type	Description
`queryString`	string	Query string that specifies the object to query, the fields to return, and any conditions for including a specific object in the query. For more information, see the *Salesforce SOQL and SOSL Reference Guide*.

Response

QueryResult

Faults

`MalformedQueryFault`

`InvalidSObjectFault`

`InvalidFieldFault`

`UnexpectedErrorFault`

SEE ALSO:

API Call Basics

queryMore()

queryMore()

Retrieves the next batch of objects from a `query()`.

Syntax

```
QueryResult = connection.queryMore( QueryLocator  QueryLocator);
```

Usage

Use this call to process `query()` calls that retrieve a large number of records (by default, more than 500) in the result set. The `query()` call retrieves the first 500 records and creates a server-side cursor that is represented in the queryLocator object. The `queryMore()` call processes subsequent records in up to 500-record chunks, resets the server-side cursor, and returns a newly generated QueryLocator. To iterate through records in the result set, you generally call `queryMore()` repeatedly until all records in the result set have been processed (the `Done` flag is `true`). You can change the maximum number of records returned to up to 2,000. See Change the Batch Size in Queries in the *Salesforce SOQL and SOSL Reference Guide* for more information.

You can't use `queryMore()` if a query includes a `GROUP BY` clause. See `GROUP BY` and `queryMore()` in the *Salesforce SOQL and SOSL Reference Guide* for more information.

Note: A `queryMore()` call on a parent object invalidates all child cursors in the previous result set. If you need the results from the child, you must use `queryMore()` on those results before using `queryMore()` on the parent results.

When querying external objects, Salesforce Connect accesses the external data in real time via Web service callouts. Each `queryMore()` call results in a Web service callout. The batch boundaries and page sizes depend on your adapter and how you set up the external data source.

We recommend the following:

- When possible, avoid paging by filtering your queries of external objects to return fewer rows than the batch size, which by default is 500 rows. Remember, obtaining each batch requires a `queryMore()` call, which results in a Web service callout.
- If the external data frequently changes, avoid using `queryMore()` calls. If the external data is modified between `queryMore()` calls, you can get an unexpected `QueryResult`.

If the primary or “driving” object for a `SELECT` statement is an external object, `queryMore()` supports only that primary object and doesn’t support subqueries.

By default, the OData 2.0 and 4.0 adapters for Salesforce Connect use client-driven paging. With client-driven paging, OData adapters convert each `queryMore()` call into an OData query that uses the `$skip` and `$top` system query options to specify the batch boundary and page size. These options are similar to using `LIMIT` and `OFFSET` clauses to page through a result set. If you enable server-driven paging on an external data source, Salesforce ignores the requested page sizes, including the default `queryMore()` batch size of 500 rows. The pages returned by the external system determine the batches, but each page can’t exceed 2,000 rows.

Sample Code—Java

This sample executes a query that fetches the first names and last names of all contacts. It calls `query()` with the query string to get the first batch of records. It then calls `queryMore()` in a loop to get subsequent batches of records until no records are returned. It writes the first and last names of the contacts queried to the console.

```
public void queryRecords() {
   QueryResult qResult = null;
   try {
      String soqlQuery = "SELECT FirstName, LastName FROM Contact";
      qResult = connection.query(soqlQuery);
      boolean done = false;
      if (qResult.getSize() > 0) {
         System.out.println("Logged-in user can see a total of "
            + qResult.getSize() + " contact records.");
         while (!done) {
            SObject[] records = qResult.getRecords();
            for (int i = 0; i < records.length; ++i) {
               Contact con = (Contact) records[i];
               String fName = con.getFirstName();
               String lName = con.getLastName();
               if (fName == null) {
                  System.out.println("Contact " + (i + 1) + ": " + lName);
               } else {
                  System.out.println("Contact " + (i + 1) + ": " + fName
                        + " " + lName);
               }
            }
            if (qResult.isDone()) {
               done = true;
            } else {
               qResult = connection.queryMore(qResult.getQueryLocator());
            }
         }
      } else {
         System.out.println("No records found.");
      }
      System.out.println("\nQuery succesfully executed.");
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Sample Code—C#

This sample executes a query that fetches the first names and last names of all contacts. It calls `query()` with the query string to get the first batch of records. It then calls `queryMore()` in a loop to get subsequent batches of records until no records are returned. It writes the first and last names of the contacts queried to the console.

```
public void queryRecords()
{
   QueryResult qResult = null;
   try
   {
      String soqlQuery = "SELECT FirstName, LastName FROM Contact";
      qResult = binding.query(soqlQuery);
      Boolean done = false;
      if (qResult.size > 0)
      {
         Console.WriteLine("Logged-in user can see a total of "
            + qResult.size + " contact records.");
         while (!done)
         {
            sObject[] records = qResult.records;
            for (int i = 0; i < records.Length; ++i)
            {
               Contact con = (Contact)records[i];
               String fName = con.FirstName;
               String lName = con.LastName;
               if (fName == null)
               {
                  Console.WriteLine("Contact " + (i + 1) + ": " + lName);
               }
               else
               {
                  Console.WriteLine("Contact " + (i + 1) + ": " + fName
                        + " " + lName);
               }
            }
            if (qResult.done)
            {
               done = true;
            }
            else
            {
               qResult = binding.queryMore(qResult.queryLocator);
            }
         }
      }
      else
      {
         Console.WriteLine("No records found.");
      }
      Console.WriteLine("\nQuery succesfully executed.");
   }
   catch (SoapException e)
   {
```

```
        Console.WriteLine("An unexpected error has occurred: " +
                                          e.Message + "\n" + e.StackTrace);
    }
}
```

Arguments

Name	Type	Description
queryLocator	QueryLocator	Represents the server-side cursor that tracks the current processing location in the query result set.

Response

QueryResult

Faults

InvalidQueryLocatorFault

UnexpectedErrorFault

SEE ALSO:

- query()
- API Call Basics
- Change the Batch Size in Queries
- https://developer.salesforce.com/page/Sample_SOAP_Messages-create

QueryResult

The `queryMore()` call returns a `QueryResult` object, which has the following properties:

Name	Type	Description
queryLocator	QueryLocator	A specialized string, similar to ID. Used in the subsequent `queryMore()` call for retrieving sets of objects from the query results, if applicable.
done	boolean	Indicates whether additional rows need to be retrieved from the query results (`false`) using another `queryMore()` call, or not (`true`). Your client application can use this value as a loop condition while iterating through the query results.
records	sObject[]	Array of sObjects representing individual objects of the specified object and containing data defined in the field list specified in the queryString.

Name	Type	Description
`size`	int	Total number of rows retrieved in the query. Your client application can use this value to determine whether the query retrieved any rows (size != 0) or not (size = 0). When querying external objects, the system may not know the number of rows that are retrieved from the external data source. If this situation occurs, size = -1.

> **Note:** A `queryMore()` call on a parent object invalidates all child cursors in the previous result set. If you need the results from the child, you must use `queryMore()` on those results before using `queryMore()` on the parent results.

QueryLocator

In the QueryResult object returned by the `queryMore()` call, `queryLocator` contains a value that you will use in the subsequent `queryMore()` call. Note the following guidelines for using this value:

- Use a `queryLocator` only once. When you pass it in a `queryMore()` call, the API returns a new `queryLocator` in the QueryResult.
- The `queryLocator` value expires automatically after 15 minutes of inactivity.
- A user can have up to ten query cursors open at a time. If ten `QueryLocator` cursors are opened when a client application with the same logged-in user attempts to open a new cursor, then the oldest of the ten cursors is released.
- You can't use a custom metadata query as a `queryLocator`.

A `QueryLocator` represents a server-side cursor.

> **Note:** A `queryMore()` call on a parent object invalidates all child cursors in the previous result set. If you need the results from the child, you must use `queryMore()` on those results before using `queryMore()` on the parent results.

`retrieve()`

Retrieves one or more records based on the specified IDs.

Syntax

```
sObject[] result = connection.retrieve(string fieldList, string sObjectType, ID ids[]);
```

Usage

Use the `retrieve()` call to retrieve individual records from an object. The client application passes the list of fields to retrieve, the object, and an array of record IDs to retrieve. The `retrieve()` call does not return records that have been deleted.

In general, you use `retrieve()` when you know in advance the IDs of the records to retrieve. Use `query()` instead to obtain records when you do not know the IDs or when you want to specify other selection criteria.

Client applications can use `retrieve()` to perform a client-side join. For example, a client application can run a `query()` to obtain a set of Opportunity records, iterate through the returned opportunity records, obtain the `accountId` for each opportunity, and then call `retrieve()` to obtain Account information for those `accountIds`.

Records for certain objects cannot be retrieved via the API. To retrieve a record via the `retrieve()` call, its object must be configured as retrieveable (`retrieveable` is `true`). To determine whether an object can be retrieved, your client application can invoke the `describeSObjects()` call on the object and inspect its `retrievable` property.

Your client application must be logged in with sufficient access rights to retrieve records within the specified object and to retrieve the fields in the specified field list. For more information, see Factors that Affect Data Access.

Sample Code—Java

This sample retrieves the Id, Name, and Website of the specified Account records. It writes the fields of the retrieved records to the console.

```
public void retrieveRecords(String[] ids) {
   try {
      SObject[] sObjects = connection.retrieve("ID, Name, Website",
            "Account", ids);
      // Verify that some objects were returned.
      // Even though we began with valid object IDs,
      // someone else might have deleted them in the meantime.
      if (sObjects != null) {
         for (int i = 0; i < sObjects.length; i++) {
            // Cast the SObject into an Account object
            Account retrievedAccount = (Account) sObjects[i];
            if (retrievedAccount != null) {
               System.out.println("Account ID: " + retrievedAccount.getId());
               System.out.println("Account Name: " + retrievedAccount.getName());
               System.out.println("Account Website: "
                     + retrievedAccount.getWebsite());
            }
         }
      }
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Sample Code—C#

This sample retrieves the Id, Name, and Website of the specified Account records. It writes the fields of the retrieved records to the console.

```
public void retrieveRecords(String[] ids)
{
   try
   {
      sObject[] sObjects = binding.retrieve("ID, Name, Website",
            "Account", ids);
      // Verify that some objects were returned.
      // Even though we began with valid object IDs,
      // someone else might have deleted them in the meantime.
      if (sObjects != null)
      {
         for (int i = 0; i < sObjects.Length; i++)
```

```
        {
            // Cast the SObject into an Account object
            Account retrievedAccount = (Account)sObjects[i];
            if (retrievedAccount != null)
            {
                Console.WriteLine("Account ID: " + retrievedAccount.Id);
                Console.WriteLine("Account Name: " + retrievedAccount.Name);
                Console.WriteLine("Account Website: "
                        + retrievedAccount.Website);
            }
        }
    }
  }
  catch (SoapException e)
  {
    Console.WriteLine("An unexpected error has occurred: " +
                              e.Message + "\n" + e.StackTrace);
  }
}
```

Arguments

Name	Type	Description
`fieldList`	string	List of one or more fields in the specified object, separated by commas. You must specify valid field names and must have read-level permissions to each specified field. The fieldList defines the ordering of fields in the `result`.
`sObjectType`	string	Object from which to retrieve data. The specified value must be a valid object for your organization. For a complete list of objects, see Standard Objects.
`ids`	ID[]	Array of one or more IDs of the objects to retrieve. You can pass a maximum of 2000 object IDs to the `retrieve()` call. For information on IDs, see ID Field Type.

Response

Name	Type	Description
`result`	sObject[]	Array of one or more sObjects representing individual records of the specified object. The number of sObjects returned in the array matches the number of IDs passed into the `retrieve()` call. If you do not have access to an object or if a passed ID is invalid, the array returns `null` for that object. For information on IDs, see ID Field Type.

Faults

`InvalidSObjectFault`

`InvalidFieldFault`

UnexpectedErrorFault

SEE ALSO:

API Call Basics

https://developer.salesforce.com/page/Sample_SOAP_Messages-create

search()

Executes a text search in your organization's data.

Syntax

```
SearchResult = connection.search(String searchString);
```

Usage

Use `search()` to search for records based on a search string. The `search()` call supports searching custom objects. For an extensive discussion about the syntax and rules used for text searches, see the *Salesforce SOQL and SOSL Reference Guide*.

Certain objects cannot be searched via the API, such as Attachment objects. To search an object via the `search()` call, the object must be configured as searchable (`isSearchable` is `true`). To determine whether an object can be searched, your client application can invoke the `describeSObjects()` call on the object and inspect its `searchable` property.

Sample Code—Java

This sample makes the `search()` call by passing it a SOSL query, which returns contacts, leads, and accounts whose phone fields contain a specified value. Next, it gets the sObject records from the results and stores the records in arrays depending on the record type. Finally, it writes the fields of the returned contacts, leads, and accounts to the console.

```
public void searchSample() {
            try {
            // Perform the search using the SOSL query.
            SearchResult sr = connection.search(
            "FIND {4159017000} IN Phone FIELDS RETURNING "
            + "Contact(Id, Phone, FirstName, LastName), "
            + "Lead(Id, Phone, FirstName, LastName), "
            + "Account(Id, Phone, Name)");

            // Get the records from the search results.
            SearchRecord[] records = sr.getSearchRecords();

            ArrayList<Contact> contacts = new ArrayList<Contact>();
            ArrayList<Lead> leads = new ArrayList<Lead>();
            ArrayList<Account> accounts = new ArrayList<Account>();

            // For each record returned, find out if it's a
            // contact, lead, or account and add it to the
            // appropriate array, then write the records
            // to the console.
```

```
            if (records.length > 0) {
            for (int i = 0; i < records.length; i++) {
            SObject record = records[i].getRecord();
            if (record instanceof Contact) {
            contacts.add((Contact) record);
            } else if (record instanceof Lead) {
            leads.add((Lead) record);
            } else if (record instanceof Account) {
            accounts.add((Account) record);
            }
            }

            System.out.println("Found " + contacts.size() + " contacts.");
            for (Contact c : contacts) {
            System.out.println(c.getId() + ", " + c.getFirstName() + ", "
            + c.getLastName() + ", " + c.getPhone());
            }
            System.out.println("Found " + leads.size() + " leads.");
            for (Lead d : leads) {
            System.out.println(d.getId() + ", " + d.getFirstName() + ", "
            + d.getLastName() + ", " + d.getPhone());
            }
            System.out.println("Found " + accounts.size() + " accounts.");
            for (Account a : accounts) {
            System.out.println(a.getId() + ", " + a.getName() + ", "
            + a.getPhone());
            }
            } else {
            System.out.println("No records were found for the search.");
            }
            } catch (Exception ce) {
            ce.printStackTrace();
            }
            }
```

Sample Code—C#

This sample makes the `search()` call by passing it a SOSL query, which returns contacts, leads, and accounts whose phone fields contain a specified value. Next, it gets the sObject records from the results and stores the records in arrays depending on the record type. Finally, it writes the fields of the returned contacts, leads, and accounts to the console.

```
public void searchSample()
            {
            try
            {
            // Perform the search using the SOSL query.
            SearchResult sr = binding.search(
            "FIND {4159017000} IN Phone FIELDS RETURNING "
            + "Contact(Id, Phone, FirstName, LastName), "
            + "Lead(Id, Phone, FirstName, LastName), "
            + "Account(Id, Phone, Name)");

            // Get the records from the search results.
```

```
SearchRecord[] records = sr.searchRecords;

List<Contact> contacts = new List<Contact>();
List<Lead> leads = new List<Lead>();
List<Account> accounts = new List<Account>();

// For each record returned, find out if it's a
// contact, lead, or account and add it to the
// appropriate array, then write the records
// to the console.
if (records.Length > 0)
{
for (int i = 0; i < records.Length; i++)
{
sObject record = records[i].record;
if (record is Contact)
{
contacts.Add((Contact)record);
}
else if (record is Lead)
{
leads.Add((Lead)record);
}
else if (record is Account)
{
accounts.Add((Account)record);
}
}

Console.WriteLine("Found " + contacts.Count + " contacts.");
foreach (Contact c in contacts)
{
Console.WriteLine(c.Id + ", " +
c.FirstName + ", " +
c.LastName + ", " +
c.Phone);
}
Console.WriteLine("Found " + leads.Count + " leads.");
foreach (Lead d in leads)
{
Console.WriteLine(d.Id + ", " +
d.FirstName + ", " +
d.LastName + ", " +
d.Phone);
}
Console.WriteLine("Found " + accounts.Count + " accounts.");
foreach (Account a in accounts)
{
Console.WriteLine(a.Id + ", " +
a.Name + ", " +
a.Phone);
}
}
else
```

```
{
Console.WriteLine("No records were found for the search.");
}
}
catch (SoapException e)
{
Console.WriteLine("An unexpected error has occurred: " +
e.Message + "\n" + e.StackTrace);
}
}
```

Arguments

Name	Type	Description
search	string	Search string that specifies the text expression to search for, the scope of fields to search, the list of objects and fields to retrieve, and the maximum number of records to return. For more information, see the *Salesforce SOQL and SOSL Reference Guide*.

Response

SearchResult

Fault

InvalidFieldFault

InvalidSObjectFault

MalformedSearchFault

UnexpectedErrorFault

SEE ALSO:

API Call Basics

https://developer.salesforce.com/page/Sample_SOAP_Messages-create

SearchResult

The `search()` call returns a SearchResult object, which has the following properties.

Name	Type	Description
queryId	string	Unique identifier for the `SOSL` search.
searchRecords	SearchRecord[]	Array of SearchRecord objects, each of which contains an sObject.
searchResultsMetadata	SearchResultsMetadata	Metadata for SearchRecords.

SearchRecord

Represents an individual record returned from a search.

Name	Type	Description
`record`	sObject	The individual record returned by the search.
`searchRecordMetadata`	SearchRecordMetadata	Metadata for `searchRecords`.
`snippet`	SearchSnippet	On the search results page, shows terms that match the search string, highlighted within the surrounding text.

SearchRecordMetadata

Metadata for search results at the record level.

Name	Type	Description
`searchPromoted`	boolean	Indicates that an article has been promoted in search results. Admins define promoted search terms by adding promoted terms to knowledge articles. Users who search for these keywords see the article first in search results. Available in API version 42.0 and later.
`spellCorrected`	boolean	Indicates that a record matches a spell-corrected search term. Appears in the response only when true.

SearchSnippet

Excerpts shown on search results pages for article, case, feed, and idea searches.

Name	Type	Description
`text`	string	The excerpt that contains the match for the search term.
`wholeFields`	WholeFields	The list of highlighted fields.

WholeFields

Contains the complete text of each field that contains highlighting for terms that match the search query. The highlighted terms are surrounded by `<mark>` tags.

Name	Type	Description
`name`	string	The name of the highlighted field.
`value`	string	The highlighted text.

SearchResultsMetadata

Global metadata for the search result.

Name	Type	Description
`entityMetadata`	EntitySearchMetadata	Search results metadata at the object level.

EntitySearchMetadata

Metadata for search results at the object level.

Name	Type	Description
`fieldMetadata`	FieldLevelSearchMetadata	Metadata for search results at the field level.
`searchPromotedMetadata`	EntitySearchPromotionMetadata	Metadata for search term promotion at the object level. Available in API version 42.0 and later.
`spellCorrectionMetadata`	EntitySpellCorrectionMetadata	Metadata for spelling correction at the object level.
`entityName`	string	Identifies the object.

FieldLevelSearchMetadata

Metadata for search results at the field level.

Name	Type	Description
`name`	string	The field name.
`label`	string	The field label.
`type`	string	The field type.

EntitySearchPromotionMetadata

Metadata for search term promotion at the object level. Appears in the response only when at least one article for an object is a promoted result. Available in API version 42.0 and later.

Name	Type	Description
`promotedResultCount`	int	Count of promoted article results at the object level.

EntitySpellCorrectionMetadata

Metadata for spelling correction at the object level. Appears in the response only when at least one record for an object matches a spell-corrected search term.

Name	Type	Description
correctedQuery	string	The spell-corrected search term.
hasNonCorrectedResults	boolean	If true, indicates that the user has access to at least one record that matches a search term that wasn't spell-corrected. Each object sometimes returns a different value.

SEE ALSO:

WITH SNIPPET

WITH SPELL_CORRECTION

undelete()

Undeletes records from the Recycle Bin.

Syntax

```
UndeleteResult[] = connection.undelete(ID[] ids );
```

Usage

Use this call to restore any deleted record that is undeletable. Undeletable records include those in the Recycle Bin. Records can be put in the Recycle Bin as the result of a merge() or delete() call. You can identify deleted records, including records deleted as the result of a merge, using the queryAll() call.

You should verify that a record can be undeleted before attempting to delete it. Some records cannot be undeleted, for example, Account records can be undeleted, but not AccountTeamMember records. To verify that a record can be undeleted, check that the value of the undeletable flag in the DescribeSObjectResult for that object is set to true.

Since a delete call cascade-deletes child records, an undelete call will undelete the cascade-deleted records. For example, deleting an account will delete all the contacts associated with that account.

You can undelete records that were deleted as the result of a merge, but the child objects will have been re-parented, which cannot be undone.

Note: Starting with API version 15.0, if you specify a value for a field that contains a string, and the value is too big for the field, the call fails and an error is returned. In previous versions of the API the value was truncated and the call succeeded. If you wish to keep the old behavior with versions 15.0 and later, use the AllowFieldTruncationHeader SOAP header.

This call supports the AllOrNoneHeader, AllowFieldTruncationHeader, and CallOptions headers.

Rollback on Error

The AllOrNoneHeader header allows you to roll back all changes unless all records are processed successfully. This header is available in API version 20.0 and later. Allows a call to roll back all changes unless all records are processed successfully.

Sample Code—Java

This sample calls `queryAll()` to get the last five deleted accounts. It then passes the IDs of these accounts to `undelete()`, which restores these accounts. Finally, it checks the results of the call and writes the IDs of the restored accounts or any errors to the console.

```
public void undeleteRecords() {
   try {
      // Get the accounts that were last deleted
      // (up to 5 accounts)
      QueryResult qResult = connection
            .queryAll("SELECT Id, SystemModstamp FROM "
                  + "Account WHERE IsDeleted=true "
                  + "ORDER BY SystemModstamp DESC LIMIT 5");

      String[] Ids = new String[qResult.getSize()];
      // Get the IDs of the deleted records
      for (int i = 0; i < qResult.getSize(); i++) {
         Ids[i] = qResult.getRecords()[i].getId();
      }

      // Restore the records
      UndeleteResult[] undelResults = connection.undelete(Ids);

      // Check the results
      for (UndeleteResult result : undelResults) {
         if (result.isSuccess()) {
            System.out.println("Undeleted Account ID: " + result.getId());
         } else {
            if (result.getErrors().length > 0) {
               System.out.println("Error message: "
                     + result.getErrors()[0].getMessage());
            }
         }
      }
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Sample Code—C#

This sample calls `queryAll()` to get the last five deleted accounts. It then passes the IDs of these accounts to `undelete()`, which restores these accounts. Finally, it checks the results of the call and writes the IDs of the restored accounts or any errors to the console.

```
public void undeleteRecords()
{
   try
   {
      // Get the accounts that were last deleted
      //   (up to 5 accounts)
      QueryResult qResult = binding.queryAll(
            "SELECT Id, SystemModstamp FROM " +
            "Account WHERE IsDeleted=true " +
            "ORDER BY SystemModstamp DESC LIMIT 5");
```

```
      String[] Ids = new String[qResult.size];
      // Get the IDs of the deleted records
      for (int i = 0; i < qResult.size; i++)
      {
         Ids[i] = qResult.records[i].Id;
      }

      // Restore the records
      UndeleteResult[] undelResults = binding.undelete(Ids);

      // Check the results
      foreach (UndeleteResult result in undelResults)
      {
         if (result.success)
         {
            Console.WriteLine("Undeleted Account ID: " +
                  result.id);
         }
         else
         {
            if (result.errors.Length > 0)
            {
               Console.WriteLine("Error message: " +
                     result.errors[0].message);
            }
         }
      }
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                              e.Message + "\n" + e.StackTrace);
   }
}
```

Arguments

Name	Type	Description
ids	ID[]	IDs of the records to be restored.

Response

UndeleteResult

Faults

`UnexpectedErrorFault`

SEE ALSO:

delete()

UndeleteResult

The `undelete()` call returns an undeleteResult object with the following properties:

Name	Type	Description
`Id`	ID	ID of the record being undeleted.
`success`	boolean	Indicates whether the undelete was successful (`true`) or not (`false`).
`errors`	Error[]	If an error occurred during the `undelete()` call, an array of one or more Error objects providing the error code and description.

update()

Updates one or more existing records in your organization's data.

Syntax

```
SaveResult[] = connection.update(sObject[] sObjects);
```

Usage

Use this call to update one or more existing records, such as accounts or contacts, in your organization's data. The `update()` call is analogous to the UPDATE statement in SQL.

Permissions

Your client application must be logged in with sufficient access rights to `update()` records objects for the specified object, as well as individual fields inside that object. For more information, see Factors that Affect Data Access.

Special Handling

Certain objects—and certain fields within those objects—require special handling or permissions. For example, you might also need permissions to access an object's parent object. Before you attempt to update a record for a particular object, be sure to read its description in the Standard Objects and in the Salesforce online help.

Updateable Objects

Certain records cannot be updated via the API. To update a record via the `update()` call, its object must be configured as updateable (`updateable` is `true`). To determine whether an object can be updated, your client application can invoke the `describeSObjects()` call on the object and inspect its `updateable` property.

Required Fields

When updating required fields, you must supply a value—you cannot set the value to `null`. For more information, see Required Fields.

ID Fields

Fields whose names contain "`Id`" are either that object's primary key (see ID Field Type) or a foreign key (see Reference Field Type). Client applications cannot update primary keys, but they can update foreign keys. For example, a client application can update the `OwnerId` of an Account, because `OwnerID` is a foreign key that refers to the user who owns the account record. Use `describeSObjects()` to confirm whether the field can be updated.

This call checks a batch for duplicate `Id` values, and if there are duplicates, the first 12 are processed. For additional duplicate `Id` values, the SaveResult for those entries is marked with an error similar to the following:

```
Maximum number of duplicate updates in one batch (12 allowed).
```

Automatically Updated Fields

The API updates certain fields automatically, such as `LastModifiedDate`, `LastModifiedById`, and `SystemModstamp`. You cannot explicitly specify these values in your `update()` call.

Resetting Values to null

To reset a field value to `null`, you add the field name to the `fieldsToNull` array in the sObject. You cannot set required fields (`nillable` is `false`) to `null`.

Valid Field Values

You must supply values that are valid for the field's data type, such as integers (not alphabetic characters) for integer fields. In your client application, follow the data formatting rules specified for your programming language and development tool (your development tool will handle the appropriate mapping of data types in SOAP messages).

String Values

When storing values in string fields, the API trims any leading and trailing white space. For example, if the value of a name field is entered as `"  ABC Company  "`, then the value is stored in the database as `"ABC Company"`.

Starting with API version 15.0, if you specify a value for a field that contains a string, and the value is too big for the field, the call fails and an error is returned. In previous versions of the API the value was truncated and the call succeeded. If you wish to keep the old behavior with versions 15.0 and later, use the AllowFieldTruncationHeader SOAP header.

Assignment Rules

When updating Case or Lead objects, your client application can set AssignmentRuleHeader options to have the case or lead automatically assigned to one or more users based on assignment rules configured in the Salesforce user interface. For more information, see Case or Lead.

Maximum Number of Objects Updated

Your client application can change up to 200 records in a single `update()` call. If an update request exceeds 200 records, the entire operation fails.

Rollback on Error

The AllOrNoneHeader header allows you to roll back all changes unless all records are processed successfully. This header is available in API version 20.0 and later. Allows a call to roll back all changes unless all records are processed successfully.

Automatic Subscriptions for Chatter Feeds

To subscribe to records they create, users must enable the `Automatically follow records that I create` option in their personal settings. If users have automatic subscriptions enabled, they automatically follow the records they create and see changes to those records in their Chatter feed on the Home tab.

When you update the owner of a record, the new owner is not automatically subscribed to the record, unless the new owner has automatic subscriptions for records enabled in his or her Chatter feed settings. The previous owner is not automatically unsubscribed. If the new owner has automatic subscriptions for records enabled, the new and previous owners both see any changes to the record in their news feed.

A user can subscribe to a record or to another user. Changes to the record and updates from the users are displayed in the Chatter feed on the user's home page, which is a useful way to stay up-to-date with other users and with changes made to records in Salesforce. Feeds are available in API version 18.0 and later.

Updating Records for Different Object Types

You can update records for multiple object types, including custom objects, in one call with API version 20.0 and later. For example, you could update a contact and an account in one call. You can update records for up to 10 objects types in one call.

Records are saved in the same order that they are entered in the `sObjects` input array.

Records for different object types are broken into multiple chunks by Salesforce. A chunk is a subset of the `sObjects` input array and each chunk contains records of one object type. Data is committed on a chunk-by-chunk basis. Any Apex triggers related to the records in a chunk are invoked once per chunk. Consider an `sObjects` input array containing the following set of records:

```
account1, account2, contact1, contact2, contact3, case1, account3, account4, contact4
```

Salesforce splits the records into five chunks:

1. `account1, account2`
2. `contact1, contact2, contact3`
3. `case1`
4. `account3, account4`
5. `contact4`

Each call can process up to 10 chunks. If the `sObjects` array contains more than 10 chunks, you must process the records in more than one call.

Warning: You can't update records for multiple object types in one call if one of those types is related to a feature in the Setup area in Salesforce. The only exceptions are the following objects:

- Custom settings objects, which are similar to custom objects. For more information, see "Create Custom Settings" in the Salesforce online help.
- GroupMember
- Group
- User if the following fields are not being updated:
  - `UserRoleId`
  - `IsActive`
  - `ForecastEnabled`
  - `IsPortalEnabled`
  - `Username`
  - `ProfileId`

`update()` and Foreign Keys

You can use external ID fields as a foreign key, which allows you to update a record and relate it to another existing record in a single step instead of querying the parent record ID first. To do this, set the foreign key to an instance of the parent sObject that has only the external ID field specified. This external ID should match the external ID value on the parent record.

The following Java and C# examples show you how to update an opportunity and relate it to an existing account using a custom external ID field named `MyExtId__c`. Each example has a method that accepts the ID of the opportunity to update. It creates an opportunity sObject and sets its ID field so that the object points to an existing opportunity to be updated, sets a new value for the stage name field, and then sets the external ID field to the account object. It then updates the opportunity. Once the opportunity is updated, the account becomes its parent and the state name is updated.

Java Example

```
public void updateForeignKeySample(String oppId) {
   try {
      Opportunity updateOpportunity = new Opportunity();
      // Point to an existing opportunity to update
      updateOpportunity.setId(oppId);
      updateOpportunity.setStageName("Qualification");

      Account parentAccountRef = new Account();
      parentAccountRef.setMyExtId__c("SAP1111111");
      updateOpportunity.setAccount(parentAccountRef);

      SaveResult[] results = connection
            .update(new SObject[] { updateOpportunity });
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

C# Example

```
public void updateForeignKeySample(String oppId)
{
   try
   {
      Opportunity updateOpportunity = new Opportunity();
      // Point to an existing opportunity to update
      updateOpportunity.Id = oppId;
      updateOpportunity.StageName = "Prospecting";

      Account parentAccountRef = new Account();
      parentAccountRef.MyExtId__c = "SAP1111111";
      updateOpportunity.Account = parentAccountRef;

      SaveResult[] results = binding.update(
         new sObject[] { updateOpportunity });
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                           e.Message + "\n" + e.StackTrace);
   }
}
```

Basic Steps for Updating Records

Use this process to update records:

1. Determine the ID of each record that you want to `update()`. For example, you might call `query()` to retrieve a set of records (with their IDs), based on specific criteria, that you would want to update. If you know the ID of the record that you want to update, you can call `retrieve()` instead. For information on IDs, see ID Field Type.
2. Create an sObject for each record, and populate its fields with the data that you want to update.
3. Construct an sObject[] array and populate that array with the records that you want to update.
4. Call `update()`, passing in the sObject[] array.
5. Process the results in the SaveResult[] object to verify whether the records have been successfully updated.

Sample Code—Java

This sample accepts the IDs of the accounts to update. It creates two account sObjects, sets each with one of the passed IDs so that the sObject points to an existing account, and sets other fields. It then makes the `update()` call and verifies the results.

```
public void updateRecords(String[] ids) {
   Account[] updates = new Account[2];

   Account account1 = new Account();
   account1.setId(ids[0]);
   account1.setShippingPostalCode("89044");
   updates[0] = account1;

   Account account2 = new Account();
```

```
   account2.setId(ids[1]);
   account2.setNumberOfEmployees(1000);
   updates[1] = account2;

   // Invoke the update call and save the results
   try {
      SaveResult[] saveResults = connection.update(updates);
      for (SaveResult saveResult : saveResults) {
         if (saveResult.isSuccess()) {
            System.out.println("Successfully updated Account ID: "
                  + saveResult.getId());
         } else {
            // Handle the errors.
            // We just print the first error out for sample purposes.
            Error[] errors = saveResult.getErrors();
            if (errors.length > 0) {
               System.out.println("Error: could not update " + "Account ID "
                     + saveResult.getId() + ".");
               System.out.println("\tThe error reported was: ("
                     + errors[0].getStatusCode() + ") "
                     + errors[0].getMessage() + ".");
            }
         }
      }
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Sample Code—C#

This sample accepts the IDs of the accounts to update. It creates two account sObjects, sets each with one of the passed IDs so that the sObject points to an existing account, and sets other fields. It then makes the `update()` call and verifies the results.

```
public void updateRecords(String[] ids)
{
   Account[] updates = new Account[2];

   Account account1 = new Account();
   account1.Id = ids[0];
   account1.ShippingPostalCode = "89044";
   updates[0] = account1;

   Account account2 = new Account();
   account2.Id = ids[1];
   account2.NumberOfEmployees = 1000;
   updates[1] = account2;

   // Invoke the update call and save the results
   try
   {
      SaveResult[] saveResults = binding.update(updates);
      foreach (SaveResult saveResult in saveResults)
```

```
        {
            if (saveResult.success)
            {
                Console.WriteLine("Successfully updated Account ID: " +
                        saveResult.id);
            }
            else
            {
                // Handle the errors.
                // We just print the first error out for sample purposes.
                Error[] errors = saveResult.errors;
                if (errors.Length > 0)
                {
                    Console.WriteLine("Error: could not update " +
                            "Account ID " + saveResult.id + "."
                    );
                    Console.WriteLine("\tThe error reported was: (" +
                            errors[0].statusCode + ") " +
                            errors[0].message + "."
                    );
                }
            }
        }
    }
    catch (SoapException e)
    {
        Console.WriteLine("An unexpected error has occurred: " +
                                    e.Message + "\n" + e.StackTrace);
    }
}
```

Arguments

Name	Type	Description
`sObjects`	sObject[]	Array of one or more records (maximum of 200) to update.

Response

SaveResult[]

Faults

`InvalidSObjectFault`

`UnexpectedErrorFault`

SEE ALSO:

API Call Basics

https://developer.salesforce.com/page/Sample_SOAP_Messages-create

SaveResult

The `update()` call returns an array of SaveResult objects. Each element in the SaveResult array corresponds to the sObject[] array passed as the `sObjects` parameter in the `update()` call. For example, the object returned in the first index in the SaveResult array matches the object specified in the first index of the sObject[] array.

A SaveResult object has the following properties:

Name	Type	Description
`id`	ID	ID of an sObject that you successfully updated. If this field contains a value, then the object was updated successfully. If this field is empty, then the object was not updated and the API returned error information instead.
`success`	boolean	Indicates whether the `update()` call succeeded (`true`) or not (`false`) for this object.
`errors`	Error[]	If an error occurred during the `update()` call, an array of one or more Error objects providing the error code and description. If your organization has active duplicate rules and a duplicate is detected, the SaveResult includes an Error with a data type of DuplicateError.

`upsert()`

Creates new records and updates existing records; uses a custom field to determine the presence of existing records. In most cases, we recommend that you use `upsert()` instead of `create()` to avoid creating unwanted duplicate records (idempotent). Available in the API version 7.0 and later.

Note: Starting with API version 15.0, if you specify a value for a field that contains a string, and the value is too big for the field, the call fails and an error is returned. In previous versions of the API the value was truncated and the call succeeded. If you wish to keep the old behavior with versions 15.0 and later, use the AllowFieldTruncationHeader SOAP header.

Syntax

```
UpsertResult[] = connection.upsert(String externalIdFieldName, sObject[] sObjects);
```

Usage

Upsert is a merging of the words insert and update. This call is available for objects if the object has an external ID field or a field with the idLookup field property.

On custom objects, this call uses an indexed custom field called an external ID to determine whether to create a new record or update an existing record. On standard objects, this call can use the name of any field with the idLookup field property instead of the external ID.

Note: External ID fields cannot be used with `merge()`.

For more information about adding custom fields, including external ID fields, to objects, see the “Adding Fields” topic in the Salesforce online help.

Using this call can dramatically reduce how many calls you need to make, particularly when:

- You are integrating your organization's Salesforce data with ERP (enterprise resource planning) systems such as accounting and manufacturing.
- You are importing data and want to prevent the creation of duplicate objects.

If you are upserting a record for an object that has a custom field with both the `External ID` and `Unique` attributes selected (a unique index), you do not need any special permissions, because the `Unique` attribute prevents the creation of duplicates. If you are upserting a record for an object that has the `External ID` attribute selected but not the `Unique` attribute selected, (a non-unique index) your client application must have the permission "View All Data" to execute this call.

Note: Matching by external ID is case-insensitive only if the external ID field has the `Unique` attribute and the `Treat "ABC" and "abc" as duplicate values (case insensitive)` option selected. These options are selected in the Salesforce user interface during field creation. If this is the case, "ABC123" is matched with "abc123." Before performing an operation, if you have external ID fields without the case-insensitive option selected, review your external IDs for any values that would be matched if case was not considered. If such values exist, you may want to modify them to make them unique, or select the case-sensitive option for your external ID fields. For more information about field attributes, see "Custom Field Attributes" in the Salesforce online help.

How Upsert Chooses to `update()` or `create()`

Upsert uses the external ID to determine whether it should create a new record or update an existing one:

- If the external ID is not matched, then a new record is created.
- If the external ID is matched once, then the existing record is updated.
- If the external ID is matched multiple times, then an error is reported.
- When batch updating multiple records where the external ID is the same for two or more records in your batch call, those records will be marked as errors in the UpsertResult file. The records will be neither created or updated.

Rollback on Error

The AllOrNoneHeader header allows you to roll back all changes unless all records are processed successfully. This header is available in API version 20.0 and later. Allows a call to roll back all changes unless all records are processed successfully.

Automatic Subscriptions for Chatter Feeds

To subscribe to records they create, users must enable the `Automatically follow records that I create` option in their personal settings. If users have automatic subscriptions enabled, they automatically follow the records they create and see changes to those records in their Chatter feed on the Home tab.

When you update the owner of a record, the new owner is not automatically subscribed to the record, unless the new owner has automatic subscriptions for records enabled in his or her Chatter feed settings. The previous owner is not automatically unsubscribed. If the new owner has automatic subscriptions for records enabled, the new and previous owners both see any changes to the record in their news feed.

A user can subscribe to a record or to another user. Changes to the record and updates from the users are displayed in the Chatter feed on the user's home page, which is a useful way to stay up-to-date with other users and with changes made to records in Salesforce. Feeds are available in API version 18.0 and later.

`upsert()` and Foreign Keys

You can use external ID fields as a foreign key, which allows you to create or update a record and relate it to another existing record in a single step instead of querying the parent record ID first. To do this, set the foreign key to an instance of the parent sObject that has only the external ID field specified. This external ID should match the external ID value on the parent record. Unlike `create()`, the parent record must already exist when using `upsert()` to create or update a child record related by a foreign key.

The following Java and C# examples upsert an opportunity. In this case, the opportunity doesn't exist in the database, so the `upsert()` call will create it. The opportunity references an existing account. Rather than specify the account ID, which would require a separate query to obtain, we specify an external ID for the account, in this example the `MyExtId__c` custom field.

Java Example

```
public void upsertForeignKeySample() {
   try {
      Opportunity newOpportunity = new Opportunity();
      newOpportunity.setName("UpsertOpportunity");
      newOpportunity.setStageName("Prospecting");
      Calendar dt = connection.getServerTimestamp().getTimestamp();
      dt.add(Calendar.DAY_OF_MONTH, 7);
      newOpportunity.setCloseDate(dt);
      newOpportunity.setMyExtId__c("UPSERTID001");

      // Parent Account record must already exist
      Account parentAccountRef = new Account();
      parentAccountRef.setMyExtId__c("SAP111111");
      newOpportunity.setAccount(parentAccountRef);

      SaveResult[] results = connection
            .upsert("MyExtId__c", new SObject[] { newOpportunity });
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

C# Example

```
public void upsertForeignKeySample()
{
   try
   {
      Opportunity newOpportunity = new Opportunity();
      newOpportunity.Name = "UpsertOpportunity";
      newOpportunity.StageName = "Prospecting";
      DateTime dt = (DateTime)binding.getServerTimestamp().timestamp;
      newOpportunity.CloseDate = dt.AddDays(7);
      newOpportunity.CloseDateSpecified = true;
      newOpportunity.MyExtId__c = "UPSERTID001";

      // Parent Account record must already exist
      Account parentAccountRef = new Account();
      parentAccountRef.MyExtId__c = "SAP111111";
      newOpportunity.Account = parentAccountRef;

      SaveResult[] results = binding
            .upsert("MyExtId", new sObject[] { newOpportunity });
```

```
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                                       e.Message + "\n" + e.StackTrace);
   }
}
```

Sample Code—Java

This sample upserts two accounts using a custom external ID field called `MyExtId__c`. The `upsert()` call matches the accounts based on the `MyExtId__c` field in order to determine whether to create or update the accounts. Before running this sample, change the `MyExtId__c` field name to an existing custom ID field name in your org.

```
public void upsertRecords() {
   SObject[] upserts = new Account[2];

   Account upsertAccount1 = new Account();
   upsertAccount1.setName("Begonia");
   upsertAccount1.setIndustry("Education");
   upsertAccount1.setMyExtId__c("1111111111");
   upserts[0] = upsertAccount1;

   Account upsertAccount2 = new Account();
   upsertAccount2 = new Account();
   upsertAccount2.setName("Bluebell");
   upsertAccount2.setIndustry("Technology");
   upsertAccount2.setMyExtId__c("2222222222");
   upserts[1] = upsertAccount2;

   try {
      // Invoke the upsert call and save the results.
      // Use External_Id custom field for matching records.
      UpsertResult[] upsertResults = connection.upsert(
                                 "MyExtId__c", upserts);
      for (UpsertResult result : upsertResults) {
         if (result.isSuccess()) {
            System.out.println("\nUpsert succeeded.");
            System.out.println((result.isCreated() ? "Insert" : "Update")
                  + " was performed.");
            System.out.println("Account ID: " + result.getId());
         } else {
            System.out.println("The Upsert failed because: "
                  + result.getErrors()[0].getMessage());
         }
      }
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Sample Code—C#

This sample upserts two accounts using a custom external ID field called `MyExtId__c`. The `upsert()` call matches the accounts based on the `MyExtId__c` field in order to determine whether to create or update the accounts. Before running this sample, change the `MyExtId__c` field name to an existing custom ID field name in your org.

```
public void upsertRecords()
{
   sObject[] upserts = new Account[2];

   Account upsertAccount1 = new Account();
   upsertAccount1.Name = "Begonia";
   upsertAccount1.Industry = "Education";
   upsertAccount1.MyExtId__c = "1111111111";
   upserts[0] = upsertAccount1;

   Account upsertAccount2 = new Account();
   upsertAccount2 = new Account();
   upsertAccount2.Name = "Bluebell";
   upsertAccount2.Industry = "Technology";
   upsertAccount2.MyExtId__c = "2222222222";
   upserts[1] = upsertAccount2;

   try
   {
      // Invoke the upsert call and save the results.
      // Use External_Id custom field for matching records.
      UpsertResult[] upsertResults =
            binding.upsert("MyExtId__c", upserts);
      foreach (UpsertResult result in upsertResults)
      {
         if (result.success)
         {
            Console.WriteLine("\nUpsert succeeded.");
            Console.WriteLine(
                  (result.created ? "Insert" : "Update") +
                  " was performed."
            );
            Console.WriteLine("Account ID: " + result.id);
         }
         else
         {
            Console.WriteLine("The Upsert failed because: " +
                  result.errors[0].message);
         }
      }
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                                  e.Message + "\n" + e.StackTrace);
   }
}
```

Arguments

Name	Type	Description
ExternalIDFieldName	string	Contains the name of the field on this object with the external ID field attribute for custom objects or the idLookup field property for standard objects. The idLookup field property is usually on a field that is the object's ID field or name field, but there are exceptions, so check for the presence of the property in the object you wish to `upsert()`.
sObjects	sObject[]	Array of one or more records (maximum of 200) to create or update. All records must have the same object type.

Response

UpsertResult[]

Faults

`InvalidSObjectFault`

`UnexpectedErrorFault`

SEE ALSO:

create()

update()

API Call Basics

UpsertResult

The `upsert` call returns an array of UpsertResult objects. Each element in the array corresponds to the sObject[] array passed as the `sObjects` parameter in the `upsert()` call. For example, the object returned in the first index in the UpsertResult array matches the object specified in the first index of the sObject[] array.

An UpsertResult object has the following properties:

Name	Type	Description
created	boolean	Indicates whether the record was created (`true`) or updated (`false`).
errors	Error[]	If errors occurred during the call, an array Error objects, providing the error code and description, is returned.
id	ID	If the call succeeded, the field contains the ID of the record that was either updated or created. If there was an error, the field is null. For more information, see ID Field Type.
success	boolean	Indicates whether the call succeeded (`true`) or not (`false`) for this object. If your organization has active duplicate rules and a duplicate is detected, the UpsertResult includes an Error with a data type of DuplicateError.

CHAPTER 12 Describe Calls

The following table lists supported describe calls in the API in alphabetical order, and provides a brief description for each. Click a call name to see syntax, usage, and more information for that call.

Note: For a list of API utility calls, see Utility Calls, and for a list of general calls (calls that query, retrieve, or modify data), see Core Calls.

Call	Description
`describeAllTabs()`	Returns information about all the tabs—including Lightning page tabs—available to the logged-in user, regardless of whether the user has chosen to hide tabs in his own user interface via the All Tabs (+) tab customization feature.
`describeAppMenu()`	Retrieves metadata about items either in the Salesforce mobile app navigation menu or the Salesforce drop-down app menu.
`describeApprovalLayout()`	Retrieves metadata about approval layouts for the specified object type.
`describeAvailableQuickActions()`	In API version 28.0, describes details about actions available for a specified parent. In API version 29.0 and greater, describes details about actions available for a specified context.
`describeCompactLayouts()`	Retrieves metadata about compact layouts for the specified object type.
`describeDataCategoryGroups()`	Retrieves available category groups for entities specified in the request.
`describeDataCategoryGroupStructures()`	Retrieves available category groups along with their data category structure for entities specified in the request.
`describeGlobal()`	Retrieves a list of available objects for your organization's data.
`describeGlobalTheme()`	Returns information about both objects and themes available to the current logged-in user.
`describeKnowledge()`	Retrieves the Knowledge language settings in the organization.
`describeLayout()`	Retrieves metadata about page layouts for the specified object type.
`describePrimaryCompactLayouts()`	Retrieves metadata about the primary compact layout for each of the specified object types.
`describeQuickActions()`	Retrieves details about specified actions.
`describeSearchScopeOrder()`	Retrieves an ordered list of objects in the logged-in user's default global search scope, including any pinned objects in the user's search results page.
`describeSObject()`	Retrieves metadata (field list and object properties) for the specified object type. Superseded by `describeSObjects()`.
`describeSObjects()`	An array-based version of describeSObject.
`describeSoftphoneLayout()`	Describes the softPhone layout(s) created for an organization.

Call	Description
describeSoqlListViews()	Retrieves the SOQL query and other information about a list view.
describeTabs()	Returns information about the standard and custom apps available to the logged-in user, as listed in the Lightning Platform app menu at the top of the page.
describeTheme()	Returns information about themes available to the current logged-in user.

Samples

The samples in this section are based on the enterprise WSDL file. They assume that you have already imported the WSDL file and created a connection. To learn how to do so, see the Quick Start tutorial.

describeAllTabs()

Returns information about all the tabs—including Lightning page tabs—available to the logged-in user, regardless of whether the user has chosen to hide tabs in his own user interface via the All Tabs (**+**) tab customization feature.

Syntax

```
DescribeTab [] = connection.describeAllTabs();
```

Usage

Use the `describeAllTabs()` call to obtain information about all the tabs that are available to the logged-in user.

Alternately, use `describeTabs()` if you want information only about the tabs that display in the Salesforce user interface for the logged-in user.

Sample Code—Java

This sample calls `describeAllTabs()`, which returns an array of DescribeTab results.

```
public void describeAllTabsSample() {
  try {
    // Describe tabs
    DescribeTab[] tabs = connection.describeAllTabs();
    System.out.println("There are " + tabs.length +
        " tabs available to you.");

      // Iterate through the returned tabs
      for (int j = 0; j < tabs.length; j++) {
        DescribeTab tab = tabs[j];
        System.out.println("\tTab " + (j + 1) + ":");
        System.out.println("\t\tName: " + tab.getName());
        System.out.println("\t\t\tAssociated SObject" + tab.getSobjectName());
        System.out.println("\t\tLabel: " + tab.getLabel());
```

```
        System.out.println("\t\tURL: " + tab.getUrl());
        DescribeColor[] tabColors = tab.getColors();
        // Iterate through tab colors as needed
        DescribeIcon[] tabIcons = tab.getIcons();
        // Iterate through tab icons as needed
      }
  } catch (ConnectionException ce) {
    ce.printStackTrace();
  }
}
```

Arguments

None.

Response

DescribeTab

describeAppMenu()

Retrieves metadata about items either in the Salesforce mobile app navigation menu or the Salesforce drop-down app menu. This call is available in API version 29.0 and later.

If you're accessing the API using a custom community URL, the `describeAppMenu()` call retrieves the tab set associated with the community ID you specify.

Syntax

```
DescribeAppMenuResult describeResult = connection.describeAppMenu(String appMenuType,
String networkId);
```

Code Sample—Java

This code sample shows how to get the menu items from the Salesforce mobile app navigation menu.

```
public void describeAppMenu() {
    try {
        //The following two lines are equivalent
        DescribeAppMenuResult describe = connection.describeAppMenu("Salesforce1", "");
       DescribeAppMenuResult appMenu = getClient().describeAppMenu(AppMenuType.Salesforce1);


        for (DescribeAppMenuItem menuItem : appMenu.getAppMenuItems()) {

            if (menuItem.getType() == "Tab.apexPage") {

                String visualforceUrl = menuItem.getContent();
```

```
                System.out.println("URL to Visualforce page: " + visualforceUrl);

            }

        }

    } catch (ConnectionException ce) {
        ce.printStackTrace();
    }
}
```

Arguments

Name	Type	Description
appMenuType	string	Restricts the menu data returned to the specified menu type. Valid values are: • AppSwitcher—to retrieve the data from the Salesforce drop-down app menu • Salesforce1—to retrieve the data from the Salesforce mobile app navigation menu • NetworkTabs—to retrieve the data from a community tab set
networkId	ID	If the appMenuType is set to NetworkTabs, enter the ID of the community to retrieve the tab set from. If appMenuType is not NetworkTabs, this field must be null or empty.

Response

DescribeAppMenuResult

Faults

InvalidOrNullForRestrictedPicklist

DescribeAppMenuResult

The describeAppMenu() call returns a list of menu items contained in the specified menu type. The following types are available in API version 29.0 and later.

Name	Type	Description
appMenuItems	DescribeAppMenuItem[]	Array of one or more menu items in the selected menu type.

DescribeAppMenuItem

Each DescribeAppMenuItem object has these fields:

Name	Type	Description
colors	DescribeColor[]	Array of color information used for the tab associated with the menu item.
content	string	Information that helps build the menu item. Each menu item has a different type of content for this field. For example, the Salesforce app menu type could contain: • FlexiPage—the ID of the Lightning page • Visualforce tab—the URL to the page, such as /apex/myApexPage. Menu items of types other than these don't use this field.
icons	DescribeColor[]	Array of icon information used for the tab associated with the menu item.
label	string	The display label of the menu item.
name	string	API name of the menu item.
type	string	The type of menu item, and its subtype, if any. Possible values for the Salesforce app menu type are: • Standard.Dashboards—Dashboards menu item • Standard.Feed—Chatter feed menu item • Standard.Today—the Today menu item • Standard.Tasks—Tasks menu item • Tab.apexPage—a Visualforce tab menu item • Tab.flexipage—a Lightning page tab menu item
url	string	The Salesforce URL the menu item should point to. For the Salesforce app menu type, this field is null for the Dashboards, Feed, Today, Tasks, and Lightning page menu items.

describeApprovalLayout()

Retrieves metadata about approval layouts for the specified object type.

Syntax

```
DescribeApprovalLayoutResult approvalLayoutResult = connection.describeApprovalLayout(string
 sObjectType, string[] approvalProcessNames);
```

Usage

Use this call to retrieve information about the approval layout for a given object type. Each approval process has one approval layout.

If you supply a null value for `approvalProcessNames`, all the approval layouts for the object are returned, instead of the approval layout of each specified approval process.

Sample Code—Java

This sample shows how to get the approval layouts of an Account sObject. It calls `describeApprovalLayout()` with the name of the sObject type to describe. After getting the approval layouts, the sample prints the name and fields found for each approval layout.

```
public void describeApprovalLayoutSample() {
  try {
    String objectToDescribe = "Account";
    DescribeApprovalLayoutResult approvalLayoutResult =
      connection.describeApprovalLayout(objectToDescribe, null);
    System.out.print("There are " + approvalLayoutResult.getApprovalLayouts().length);
    System.out.println(" approval layouts for the " + objectToDescribe + " object.");

    // Get all the approval layouts for the sObject
    for (int i = 0; i < approvalLayoutResult.getApprovalLayouts().length; i++) {
      DescribeApprovalLayout aLayout = approvalLayoutResult.getApprovalLayouts()[i];
      System.out.println(" There is an approval layout with name: " + aLayout.getName());

      DescribeLayoutItem[] layoutItems = aLayout.getLayoutItems();
      System.out.print(" There are " + layoutItems.length);
      System.out.println(" fields in this approval layout.");
      for (int j = 0; j < layoutItems.length; j++) {
        System.out.print("This approval layout has a field with name: ");
        System.out.println(layoutItems[j].getLabel());
      }
    }
  } catch (ConnectionException ce) {
    ce.printStackTrace();
  }
}
```

Arguments

Name	Type	Description
`sObjectType`	string	The specified value must be a valid object for your organization. If the object is a person account, specify Account, or if it is a person contact, specify Contact.
`approvalProcessNames`	string[]	Optional array of the approval process API names to return approval layout metadata for.

Response

DescribeApprovalLayoutResult

Faults

`InvalidSObjectFault`

UnexpectedErrorFault

DescribeApprovalLayoutResult

The `describeApprovalLayout()` call returns a DescribeApprovalLayoutResult object containing top-level record type information about the passed-in `sObjectType`. Your client application can traverse this object to retrieve detailed metadata about the approval layout.

Name	Type	Description
`approvalLayouts`	DescribeApprovalLayout[]	List of all the approval layouts in use by the object.

DescribeApprovalLayout

Represents an individual item in the DescribeApprovalLayout list.

Name	Type	Description
`id`	ID	Unique ID of this ApprovalLayout. For information on IDs, see ID Field Type.
`label`	string	Label of the approval layout.
`layoutItems`	DescribeLayoutItem[]	Array of one or more fields assigned to the approval layout.
`name`	string	API name of the approval layout.

describeAvailableQuickActions()

In API version 28.0, describes details about actions available for a specified parent. In API version 29.0 and greater, describes details about actions available for a specified context.

Syntax

```
DescribeAvailableQuickActionResult [] = connection.describeAvailableQuickActions(string
parentOrContextType );
```

Usage

Use `describeAvailableQuickActions()` to get the list of actions whose parent (API version 28.0) or context (API version 29.0 and greater) entity name is supplied as well as standard and global actions. The `describeAvailableQuickActions()` call uses the parent entity name, such as “Account”, or “null” for global actions, or in API version 29.0 and greater, the context, to return an array of DescribeAvailableQuickActionResult.

Sample—Java

This sample retrieves and displays the available action information for the Account object.

```
public void example() throws Exception {
    DescribeAvailableQuickActionResult[] aResult =
        conn.describeAvailableQuickActions("Account");
    for(DescribeAvailableQuickActionResult ar : aResult) {
        System.out.println("Action label: " + ar.getLabel());
        System.out.println("Action name: " + ar.getName());
        System.out.println("Action type: " + ar.getType());
    }
}
```

Arguments

Name	Type	Description
`parentOrContextType`	string	Either a standard or custom object. • The `parentType` applies only to API version 28.0. • The `contextType` applies to API version 29.0 and greater.

Response

An array of DescribeAvailableQuickActionResult objects.

Faults

`connection.exception` errors

DescribeAvailableQuickActionResult

The `describeAvailableQuickActions()` call returns an array of DescribeAvailableQuickActionResult objects. In API version 28.0, each DescribeAvailableQuickActionResult object represents details about actions available for a specified parent. In API version 29.0 and greater, each DescribeAvailableQuickActionResult object represents details about actions available for a specified context.

Name	Type	Description
`actionEnumOrId`	string	The unique ID for the action. If the action doesn't have an ID, its API name is used. This field is available in API version 35.0 and later.
`label`	string	The action label.
`name`	string	The action name.
`type`	string	• `LogACall`

Name	Type	Description
		• `SocialPost` • `Canvas` • `Create` • `VisualforcePage` • `Update`

describeCompactLayouts()

Retrieves metadata about compact layouts for the specified object type.

Syntax

```
DescribeCompactLayoutsResult compactLayoutResult = connection.describeCompactLayouts(string
 sObjectType, ID[] recordTypeId);
```

Usage

Use this call to retrieve information about the compact layout for a given object type. This call returns metadata about a given compact layout, including the record type mappings. For more information about compact layouts, see the Salesforce online help.

Sample Code—Java

This sample shows how to get the compact layouts of an Account sObject. It calls `describeCompactLayouts()` with the name of the sObject type to describe. After getting the compact layouts, the sample prints the images, fields, and action buttons found for each compact layout. Next, it prints the system default compact layout for the object, then the mapping information of record types to compact layouts.

```
public void testDescribeCompactLayoutsSample() {
    try {
        String objectToDescribe = "Account";
        DescribeCompactLayoutsResult compactLayoutResult = connection
                .describeCompactLayouts(objectToDescribe, null);
        System.out.println("There are " + compactLayoutResult.getCompactLayouts().length
                + " compact layouts for the " + objectToDescribe + " object.");

        // Get all the compact layouts for the sObject
        for (int i = 0; i < compactLayoutResult.getCompactLayouts().length; i++) {
            DescribeCompactLayout cLayout = compactLayoutResult.getCompactLayouts()[i];
          System.out.println(" There is a compact layout with name: " + cLayout.getName());

            DescribeLayoutItem[] fieldItems = cLayout.getFieldItems();
           System.out.println(" There are " + fieldItems.length + " fields in this compact
 layout.");

            // Write field items
```

```
            for (int j = 0; j < fieldItems.length; j++) {
                System.out.println(j + " This compact layout has a field with name: " +
fieldItems[j].getLabel());
            }

            DescribeLayoutItem[] imageItems = cLayout.getImageItems();
            System.out.println(" There are " + imageItems.length + " image fields in this
 compact layout.");

            // Write the image items
            for (int j = 0; j < imageItems.length; j++) {
               System.out.println(j + " This compact layout has an image field with name:
 " + imageItems[j].getLabel());
            }

            DescribeLayoutButton[] actions = cLayout.getActions();
            System.out.println(" There are " + actions.length + " buttons in this compact
 layout.");

            // Write the action buttons
            for (int j = 0; j < actions.length; j++) {
                System.out.println(j + " This compact layout has a button with name: " +
actions[j].getLabel());
            }

            System.out.println("This object's default compact layout is: "
                    + compactLayoutResult.getDefaultCompactLayoutId());

            RecordTypeCompactLayoutMapping[] mappings =
compactLayoutResult.getRecordTypeCompactLayoutMappings();
            System.out.println("There are " + mappings.length + " record type to compact
layout mapping for the "
                    + objectToDescribe + " object.");
            for (int j = 0; j < mappings.length; j++) {
                System.out.println(j + " Record type " + mappings[j].getRecordTypeId()
                        + " is mapped to compact layout " +
mappings[j].getCompactLayoutId());
            }
        }

    } catch (ConnectionException ce) {
        ce.printStackTrace();
    }

}
```

Arguments

Name	Type	Description
sObjectType	string	The specified value must be a valid object for your organization. If the object is a person account, specify Account, or if it is a person contact, specify Contact.

Name	Type	Description
recordTypeId	ID[]	Optional parameter that restricts the compact layout data returned to the specified record types.

Response

DescribeCompactLayoutsResult

Faults

InvalidSObjectFault

UnexpectedErrorFault

DescribeCompactLayoutsResult

The describeCompactLayouts() call returns a DescribeCompactLayoutsResult object containing top-level record type information about the passed-in sObjectType, as well as a mapping of record types to compact layouts. Your client application can traverse this object to retrieve detailed metadata about the compact layout.

Name	Type	Description
compactLayouts	DescribeCompactLayout[]	List of all the compact layouts in use by the object.
defaultCompactLayoutId	ID	ID of the primary compact layout assigned to the object. The system default compact layout ID has a value of null.
recordTypeCompactLayoutMappings	RecordTypeCompactLayoutMapping[]	Record type mapping(s) for the object. The compact layouts associated with the object may be mapped to more than one record type.

DescribeCompactLayout

Represents an individual item in the DescribeCompactLayout list.

Name	Type	Description
actions	DescribeLayoutButton[]	Array of one or more DescribeLayoutButton items assigned to the compact layout. This list is set by Salesforce and is read-only.
fieldItems	DescribeLayoutItem[]	Array of one or more fields assigned to the compact layout.
id	ID	Unique ID of this CompactLayout. For information on IDs, see ID Field Type.

Name	Type	Description
imageItems	DescribeLayoutItem[]	Array of one or more images assigned to the compact layout. This list is set by Salesforce and is read-only.
label	string	Label of the compact layout.
name	string	API name of the compact layout.
objectType	string	The name of the object to which the compact layout is assigned.

RecordTypeCompactLayoutMapping

Represents a single record type mapping in the `recordTypeCompactLayoutMappings` field in a DescribeCompactLayoutsResult object. This object is a map of valid `recordTypeId` to `compactLayoutId`.

Name	Type	Description
available	boolean	Indicates whether this record type is available (`true`) or not (`false`). Availability is used to display a list of available record types to the user when they are creating a new record.
compactLayoutId	ID	ID of the compact layout associated with this record type. This field has a value of `null` if the record type is associated with the system default compact layout.
compactLayoutName	string	API name of the compact layout.
recordTypeName	string	API name of the record type.
recordTypeId	ID	ID of the record type.

describeDataCategoryGroups()

Retrieves available category groups for objects specified in the request.

Syntax

```
DescribeDataCategoryGroupResult[] = connection.describeDataCategoryGroups()(string[]
sObjectTypes);
```

Usage

Use this call to describe the available category groups for the objects specified in the request. This call can be used with the `describeDataCategoryGroupStructures()` call to describe all the categories available for a specific object. For additional information about data categories, see "Work with Data Categories" in the Salesforce online help.

Sample Code—Java

This sample shows how to retrieve the data category groups associated with:

- Salesforce Knowledge articles
- Questions from the Answers feature

It returns the name, label and description of a category group and the name of the associated `sobject` (article or question). It also returns the number of data categories in the data category group.

```
public void describeDataCategoryGroupsSample() {
                try {
                // Make the describe call for data category groups
                DescribeDataCategoryGroupResult[] results =
                connection.describeDataCategoryGroups(new String[] {
                "KnowledgeArticleVersion", "Question"});

                // Get the properties of each data category group
                for (int i = 0; i < results.length; i++) {
                System.out.println("sObject: " +
                results[i].getSobject());
                System.out.println("Group name: " +
                results[i].getName());
                System.out.println("Group label: " +
                results[i].getLabel());
                System.out.println("Group description: " +
                (results[i].getDescription()==null? "" :
                results[i].getDescription()));
                System.out.println("Number of categories: " +
                results[i].getCategoryCount());
                }
                } catch (ConnectionException ce) {
                ce.printStackTrace();
                }
                }
```

Sample Code—C#

This sample shows how to retrieve the data category groups associated with:

- Salesforce Knowledge articles
- Questions from the Answers feature

It returns the name, label and description of a category group and the name of the associated `sobject` (article or question). It also returns the number of data categories in the data category group.

```
public void describeDataCategoryGroups() {
                try {
                // Make the describe call for data category groups
                DescribeDataCategoryGroupResult[] results =
                binding.describeDataCategoryGroups(new String[] {
                "KnowledgeArticleVersion", "Question"});

                // Get the properties of each data category group
                for (int i = 0; i < results.Length; i++) {
```

```
Console.WriteLine("sObject: " +
results[i].sobject);
Console.WriteLine("Group name: " +
results[i].name);
Console.WriteLine("Group label: " +
results[i].label);
Console.WriteLine("Group description: " +
(results[i].description==null? "" :
results[i].description));
Console.WriteLine("Number of categories: " +
results[i].categoryCount);
}
} catch (SoapException e) {
Console.WriteLine("An unexpected error has occurred: " +
e.Message + "\n" + e.StackTrace);
}
}
```

Arguments

Name	Type	Description
sObjectTypes	string[]	The specified value can be: • KnowledgeArticleVersion—to retrieve category groups associated with article types. • Question—to retrieve category groups associated with questions. For additional information about articles and questions, see "Work with Articles and Translations" in the Salesforce online help.

Response

DescribeDataCategoryGroupResult

Faults

InvalidSObjectFault

UnexpectedErrorFault

DescribeDataCategoryGroupResult

The describeDataCategoryGroups() call returns a DescribeDataCategoryGroupResult object containing the list of the category groups associated with the specified objects.

Name	Type	Description
categoryCount	int	The number of visible data categories in the data category group.

Name	Type	Description
description	string	The description of the data category group.
label	string	Label for the data category group in the Salesforce user interface.
name	string	The unique name used for API access to the data category group .
sobject	string	The object associated with the data category group.

describeDataCategoryGroupStructures()

Retrieves available category groups along with their data category structure for objects specified in the request.

Syntax

```
describeDataCategoryGroupStructures()[] = connection.
               describeDataCategoryGroupStructures()(DataCategoryGroupSObjectTypePair[]
 pairs, boolean topCategoriesOnly)
```

Usage

Use this call to return the visible data category structure for the given object category group pairs. First use `describeDataCategoryGroups()` to find the available category groups for the objects specified. From the returned list, choose the object category group pairs to pass as the input in `describeDataCategoryGroupStructures()`. This call returns all the visible categories and data category structure as output. For additional information about data categories and data category visibility, see “Work with Data Categories” and “Data Category Visibility” in the Salesforce online help.

Sample Code—Java

This sample shows how to use sObject and data category group pairs to retrieve data categories for each pair. It calls `describeDataCategoryGroupStructures()` with two pairs, KnowledgeArticleVersion/Regions and Question/Regions, and iterates through the results of this call. It gets the top categories for each result, which is “All”, and then gets the first-level child categories. The sample requires that you set up a data category group called *Regions* with some child categories and associate it with a knowledge article and questions. Alternatively, you can replace the data category group name in the sample if you want to use an existing data category group in your org that has a different name.

```
public void describeDataCateogryGroupStructuresSample() {
                try {
                // Create the data category pairs
                DataCategoryGroupSobjectTypePair pair1 =
                new DataCategoryGroupSobjectTypePair();
                DataCategoryGroupSobjectTypePair pair2 =
                new DataCategoryGroupSobjectTypePair();
                pair1.setSobject("KnowledgeArticleVersion");
                pair1.setDataCategoryGroupName("Regions");
                pair2.setSobject("Question");
```

```
pair2.setDataCategoryGroupName("Regions");

DataCategoryGroupSobjectTypePair[] pairs =
new DataCategoryGroupSobjectTypePair[] {
pair1,
pair2
};

// Get the list of top level categories using the describe call
DescribeDataCategoryGroupStructureResult[] results =
connection.describeDataCategoryGroupStructures(
pairs,
false
);

// Iterate through each result and get some properties
// including top categories and child categories
for (int i = 0; i < results.length; i++) {
DescribeDataCategoryGroupStructureResult result =
results[i];
String sObject = result.getSobject();
System.out.println("sObject: " + sObject);
System.out.println("Group name: " + result.getName());
System.out.println("Group label: " + result.getLabel());
System.out.println("Group description: " +
result.getDescription());

// Get the top-level categories
DataCategory[] topCategories = result.getTopCategories();

// Iterate through the top level categories and retrieve
// some information
for (int j = 0; j < topCategories.length; j++) {
DataCategory topCategory = topCategories[j];
System.out.println("Category name: " +
topCategory.getName());
System.out.println("Category label: " +
topCategory.getLabel());
DataCategory [] childCategories =
topCategory.getChildCategories();
System.out.println("Child categories: ");
for (int k = 0; k < childCategories.length; k++) {
System.out.println("\t" + k + ". Category name: " +
childCategories[k].getName());
System.out.println("\t" + k + ". Category label: " +
childCategories[k].getLabel());
}
}
}
} catch (ConnectionException ce) {
ce.printStackTrace();
}
}
```

Sample Code—C#

This sample shows how to use sObject and data category group pairs to retrieve data categories for each pair. It calls `describeDataCategoryGroupStructures()` with two pairs, KnowledgeArticleVersion/Regions and Question/Regions, and iterates through the results of this call. It gets the top categories for each result, which is "All", and then gets the first-level child categories. The sample requires that you set up a data category group called *`Regions`* with some child categories and associate it with a knowledge article and questions. Alternatively, you can replace the data category group name in the sample if you want to use an existing data category group in your org that has a different name.

```
public void describeDataCateogryGroupStructuresSample() {
                try {
                // Create the data category pairs
                DataCategoryGroupSobjectTypePair pair1 =
                new DataCategoryGroupSobjectTypePair();
                DataCategoryGroupSobjectTypePair pair2 =
                new DataCategoryGroupSobjectTypePair();
                pair1.sobject = "KnowledgeArticleVersion";
                //pair1.setDataCategoryGroupName("Regions");
                pair1.dataCategoryGroupName = "KBArticleCategories";
                pair2.sobject = "Question";
                //pair2.setDataCategoryGroupName("Regions");
                pair2.dataCategoryGroupName = "KBArticleCategories";

                DataCategoryGroupSobjectTypePair[] pairs =
                new DataCategoryGroupSobjectTypePair[] {
                pair1,
                pair2
                };

                // Get the list of top level categories using the describe call
                DescribeDataCategoryGroupStructureResult[] results =
                binding.describeDataCategoryGroupStructures(
                pairs,
                false
                );

                // Iterate through each result and get some properties
                // including top categories and child categories
                for (int i = 0; i < results.Length; i++) {
                DescribeDataCategoryGroupStructureResult result =
                results[i];
                String sObject = result.sobject;
                Console.WriteLine("sObject: " + sObject);
                Console.WriteLine("Group name: " + result.name);
                Console.WriteLine("Group label: " + result.label);
                Console.WriteLine("Group description: " +
                result.description);

                // Get the top-level categories
                DataCategory[] topCategories = result.topCategories;

                // Iterate through the top level categories and retrieve
                // some information
                for (int j = 0; j < topCategories.Length; j++) {
```

```
DataCategory topCategory = topCategories[j];
Console.WriteLine("Category name: " +
topCategory.name);
Console.WriteLine("Category label: " +
topCategory.label);
DataCategory [] childCategories =
topCategory.childCategories;
Console.WriteLine("Child categories: ");
for (int k = 0; k < childCategories.Length; k++) {
Console.WriteLine("\t" + k + ". Category name: " +
childCategories[k].name);
Console.WriteLine("\t" + k + ". Category label: " +
childCategories[k].label);
}
}
}
}
catch (SoapException e)
{
Console.WriteLine("An unexpected error has occurred: " +
e.Message + "\n" + e.StackTrace);
}
}
```

Arguments

Name	Type	Description
`pairs`	DataCategoryGroupSObjectTypePair[]	Specifies a category group and an object to query. Visible data categories are retrieved for that object.
`topCategoriesOnly`	boolean	Indicates whether the call returns only the top (`true`) or all the categories (`false`) visible depending on the user's data category group visibility settings. For more information on data category group visibility, see Data Category Visibility in the Salesforce online help.

DataCategoryGroupSObjectTypePair contains the following fields:

Name	Type	Description
`dataCategoryGroupName`	string	The unique name used for API access to the data category group.
`sobject`	string	The object associated with the data category group

Response

`describeDataCategoryGroupStructures()`[]

Faults

InvalidSObjectFault

UnexpectedErrorFault

describeDataCategoryGroupStructures()

The describeDataCategoryGroupStructures() call returns an array of DescribeDataCategoryGroupStructureResult objects containing the category groups and categories associated with the specified objects.

Name	Type	Description
description	string	The description of the data category group.
label	string	The label for the data category group in the Salesforce user interface.
name	string	The unique name used for API access to the data category group.
sobject	string	The object associated with the data category group.
topCategories	DataCategory[]	A list of top level categories visible depending on the user's data category group visibility settings. For more information on data category group visibility, see “Data Category Visibility” in the Salesforce online help.

DataCategory

Name	Type	Description
childDataCategories	DataCategory[]	A recursive list of visible sub categories in the data category.
label	string	The label for the data category in the Salesforce user interface.
name	string	The unique name used for API access to the data category.

describeGlobal()

Retrieves a list of available objects for your organization’s data.

Syntax

```
DescribeGlobalResult = connection.describeGlobal();
```

Usage

Use `describeGlobal()` to obtain a list of available objects for your organization. You can then iterate through this list and use `describeSObjects()` to obtain metadata about individual objects.

Your client application must be logged in with sufficient access rights to retrieve metadata about your organization’s data. For more information, see Factors that Affect Data Access.

Sample Code—Java

This sample shows how to perform a global describe. It then retrieves the sObjects from the global describe result and writes their names to the console.

```
public void describeGlobalSample() {
    try {
        // Make the describeGlobal() call
        DescribeGlobalResult describeGlobalResult =
            connection.describeGlobal();

        // Get the sObjects from the describe global result
        DescribeGlobalSObjectResult[] sobjectResults =
            describeGlobalResult.getSobjects();

        // Write the name of each sObject to the console
        for (int i = 0; i < sobjectResults.length; i++) {
          System.out.println(sobjectResults[i].getName());
        }
    } catch (ConnectionException ce) {
        ce.printStackTrace();
    }
}
```

Sample Code—C#

This sample shows how to perform a global describe. It then retrieves the sObjects from the global describe result and writes their names to the console.

```
public void describeGlobalSample()
{
    try
    {
        // Make the describeGlobal() call
        DescribeGlobalResult dgr = binding.describeGlobal();

        // Get the sObjects from the describe global result
        DescribeGlobalSObjectResult[] sObjResults = dgr.sobjects;

        // Write the name of each sObject to the console
        for (int i = 0; i < sObjResults.Length; i++)
        {
            Console.WriteLine(sObjResults[i].name);
        }
    }
    catch (SoapException e)
    {
        Console.WriteLine("An unexpected error has occurred: " +
            e.Message + "\n" + e.StackTrace);
    }
}
```

Arguments

None.

Response

DescribeGlobalResult

Fault

`UnexpectedErrorFault`

SEE ALSO:

- describeSObjects()
- API Call Basics
- Using the Partner WSDL
- https://developer.salesforce.com/page/Sample_SOAP_Messages

DescribeGlobalResult

The `describeGlobal()` call returns a `DescribeGlobalResult` object, which has the following properties.

Name	Type	Description
`encoding`	string	Specifies how an org's data is encoded, such as `UTF-8` or `ISO-8859-1`.
`maxBatchSize`	int	Maximum number of records allowed in a `create()`, `update()`, or `delete()` call.
`sobjects`	DescribeGlobalSObjectResult[]	List of result objects that returns information about the available objects for your org. Available in API version 17.0 and later. This property enhances the information that was previously available in the `types` property.
`types`	string[]	List of available objects for your org. You iterate through this list to retrieve the object string that you pass to `describeSObjects()`. Beginning with API version 17.0, this property is no longer supported. Use the `name` property in DescribeGlobalSObjectResult instead.

DescribeGlobalSObjectResult

Represents the properties for one of the objects available for your org. Each object has the following properties:

Name	Type	Description
`activateable`	boolean	Reserved for future use.

Name	Type	Description
`createable`	boolean	Indicates whether the object can be created via the `create()` call (`true`) or not (`false`).
`custom`	boolean	Indicates whether the object is a custom object (`true`) or not (`false`).
`customSetting`	boolean	Indicates whether the object is a custom setting object (`true`) or not (`false`).
`dataTranslationEnabled`	boolean	Indicates whether data translation is enabled for the object (`true`) or not (`false`). Available in API version 49.0 and later.
`deepCloneable`	boolean	Reserved for future use.
`deletable`	boolean	Indicates whether the object can be deleted via the `delete()` call (`true`) or not (`false`).
`deprecatedAndHidden`	boolean	Reserved for future use.
`feedEnabled`	boolean	Indicates whether Chatter feeds are enabled for the object (`true`) or not (`false`). This property is available in API version 19.0 and later.
`isInterface`	boolean	Reserved for future use.
`keyPrefix`	string	Three-character prefix code in the object ID. Object IDs are prefixed with three-character codes that specify the type of the object. For example, Account objects have a prefix of `001` and Opportunity objects have a prefix of `006`. Note that a key prefix can sometimes be shared by multiple objects so it does not always uniquely identify an object. Use the value of this field to determine the object type of a parent in those cases where the child may have more than one object type as parent (polymorphic). For example, you may need to obtain the `keyPrefix` value for the parent of a Task or Event.
`label`	string	Label text for a tab or field renamed in the user interface, if applicable, or the object name, if not. For example, an organization representing a medical vertical might rename Account to `Patient`. Tabs and fields can be renamed in the Salesforce user interface. See the Salesforce online help for more information.
`labelPlural`	string	Label text for an object that represents the plural version of an object name, for example, “Accounts.”
`layoutable`	boolean	Indicates whether the object supports the `describeLayout()` call (`true`) or not (`false`).
`mergeable`	boolean	Indicates whether the object can be merged with other objects of its type (`true`) or not (`false`). `true` for leads, contacts, and accounts.
`mruEnabled`	boolean	Indicates whether Most Recently Used (MRU) list functionality is enabled for the object (`true`) or not (`false`).
`name`	string	Name of the object. This name is equivalent to an entry in the `types` list that is no longer supported, beginning with API version 17.0.

Name	Type	Description
queryable	boolean	Indicates whether the object can be queried via the query() call (true) or not (false).
replicateable	boolean	Indicates whether the object can be replicated via the getUpdated() and getDeleted() calls (true) or not (false).
retrieveable	boolean	Indicates whether the object can be retrieved via the retrieve() call (true) or not (false).
searchable	boolean	Indicates whether the object can be searched via the search() call (true) or not (false).
triggerable	boolean	Indicates whether the object supports Apex triggers.
undeletable	boolean	Indicates whether an object can be undeleted using the undelete() call (true) or not (false).
updateable	boolean	Indicates whether the object can be updated via the update() call (true) or not (false).

describeGlobalTheme()

Returns information about both objects and themes available to the current logged-in user.

Syntax

```
DescribeGlobalTheme = connection.describeGlobalTheme();
```

Usage

Use `describeGlobalTheme()` to get both a list of available objects and theme information about those objects for your organization. `describeGlobalTheme()` is a combination of `describeGlobal()` and `describeTheme()` combined into a single call.

Your client application must be logged in with sufficient access rights to retrieve theme and object information about your organization's data. For more information, see Factors that Affect Data Access.

`describeGlobalTheme()` is available in API version 29.0 and later.

Sample

This Java sample calls `describeGlobalTheme()` and then iterates over the retrieved object and theme information.

```
public static void describeGlobalThemeExample() {
    try {
        // Get current theme and object information
        DescribeGlobalTheme globalThemeResult = connection.describeGlobalTheme();
        DescribeGlobalResult globalResult = globalThemeResult.getGlobal();
        DescribeThemeResult globalTheme = globalThemeResult.getTheme();
```

```
        // For the themes, get the array of theme items, one per object
        DescribeThemeItem[] themeItems = globalTheme.getThemeItems();
        for (int i = 0; i < themeItems.length; i++) {
            DescribeThemeItem themeItem = themeItems[i];
            System.out.println("Theme information for object " + themeItem.getName());
            // Get color and icon info for each themeItem
            DescribeColor colors[] = themeItem.getColors();
            System.out.println("    Number of colors: " + colors.length);
            int k;
            for (k = 0; k < colors.length; k++) {
                DescribeColor color = colors[k];
                System.out.println("    For Color #" + k + ":");
                System.out.println("      Web RGB Color: " + color.getColor());
                System.out.println("      Context: " + color.getContext());
                System.out.println("      Theme: " + color.getTheme());
            }
            DescribeIcon icons[] = themeItem.getIcons();
            System.out.println("    Number of icons: " + icons.length);
            for (k = 0; k < icons.length; k++) {
                DescribeIcon icon = icons[k];
                System.out.println("    For Icon #" + k + ":");
                System.out.println("      ContentType: " + icon.getContentType());
                System.out.println("      Height: " + icon.getHeight());
                System.out.println("      Theme: " + icon.getTheme());
                System.out.println("      URL: " + icon.getUrl());
                System.out.println("      Width: " + icon.getWidth());
            }
        }
    } catch (ConnectionException ce) {
        ce.printStackTrace();
    }
}
```

Response

DescribeGlobalTheme

Faults

`UnexpectedErrorFault`

SEE ALSO:

- DescribeGlobalTheme
- DescribeThemeResult
- DescribeThemeItem
- DescribeColor
- DescribeIcon

DescribeGlobalTheme

The `describeGlobalTheme()` call returns DescribeGlobalTheme, which contains a DescribeThemeResult and a DescribeGlobalResult.

Name	Type	Description
`global`	DescribeGlobalResult	Object information.
`theme`	DescribeThemeResult	Theme information.

`describeKnowledge()`

Retrieves the Knowledge language settings in the organization.

Syntax

```
KnowledgeSettings result = _connection.describeKnowledgeSettings();
```

Usage

Use this call to describe the existing Knowledge language settings, including the default Knowledge language, supported languages, and a list of Knowledge language information. You can also use KnowledgeSettings in the Metadata API to obtain similar information.

Sample Code—Java

This sample shows how to retrieve the Knowledge language settings. It returns the default Knowledge language, a list of Knowledge supported language, including the language code and whether it's an active Knowledge language.

```
public void describeKnowledgeSettingsSample() {
try {

// Make the describe call for KnowledgeSettings
KnowledgeSettings result = connection.describeKnowledgeSettings();

// Get the properties of KnowledgeSettings
System.out.println("Knowledge default language: " + result.getDefaultLanguage());
for (KnowledgeLanguageItem lang : result.getLanguages()) {
System.out.println("Language: " + lang.getName());
System.out.println("Active: " + lang.isActive());
}
} catch (ConnectionException ex) {
ex.printStackTrace();
}
}
```

Sample Code—C#

This sample shows how to retrieve the Knowledge language settings. It returns the default Knowledge language, a list of Knowledge supported language, including the language code and whether it's an active Knowledge language.

```
public void describeKnowledgeSettingsSample() {
try {

// Make the describe call for KnowledgeSettings
KnowledgeSettings result = connection.describeKnowledgeSettings();

// Get the properties of KnowledgeSettings
Console.WriteLine("Knowledge default language: " + result.getDefaultLanguage());
for (KnowledgeLanguageItem lang : result.getLanguages()) {
Console.WriteLine("Language: " + lang.getName());
Console.WriteLine("Active: " + lang.isActive());
}
} catch (SoapException ex) {
ex.printStackTrace();
}
}
```

Response

KnowledgeSettings

`describeLayout()`

Retrieves metadata about page layouts for the specified object type.

Syntax

```
DescribeLayoutResult = connection.describeLayout(string sObjectType, string layoutName,
ID recordTypeID[]);
```

Usage

Use this call to retrieve information about the layout (presentation of data to users) for a given object type. This call returns metadata about a given page layout, such as the detail page layout, the edit page layout, and the record type mappings. For additional information, see "Page Layouts" in the Salesforce online help.

Generally, user profiles have one layout associated with each object. In Enterprise, Unlimited, and Performance Editions, user profiles can have multiple layouts per object, where each layout is specific to a given record type. This call returns metadata for multiple layouts, if applicable.

Layouts can be further customized in standard objects that have defined named layouts, which are separate from the primary layout for both the profile and the record type. One example of named layouts is the UserAlt layout defined on the User object, which is consumed in the Salesforce mobile app instead of the primary User layout. New layout names can only be defined by Salesforce, but customization of named layouts is controlled by administrators in the same way as primary layouts.

If you supply a null value for `recordTypeIds`, all the layouts for that user are returned, instead of just the layouts for each specified record type. The same layout can be associated with multiple record types for the user's profile, in which case there would only be one layout returned.

Note: This call is an advanced API call that is typically used only by partners who have written custom page rendering code for generating output on a specialized device (for example, on PDAs) and need to examine the layout details of an object before rendering the page output.

Use the following procedure to describe layouts:

1. To display a detail page or edit page for a record that exists, a client application first gets the `recordTypeIds` from the record, then it finds the layoutId associated with that `recordTypeIds` (through recordTypeMapping), and finally it uses that layout information to render the page.
2. To display the create version of an edit page, a client application first determines whether more than one record type is available and, if so, presents the user with a choice. Once a record type has been chosen, then the client application uses the layout information to render the page. It uses the picklist values from the RecordTypeMapping to display valid picklist values for picklist fields.
3. A client application can access the labels for the layout, using the DescribeLayoutResult.

The following restrictions apply to person account record types:

- `describeLayout()` for version 7.0 and below returns the default business account record type as the default record type even if the tab default is a person account record type. In version 8.0 and after, it will always be the tab default.
- `describeLayout()` for version 7.0 and below doesn't return any person account record types.

For more information about person account record types, see Person Account Record Types.

Sample Code—Java

This sample shows how to get the layouts of an Account sObject. It calls `describeLayout()` with the name of the sObject type to describe. It doesn't specify record type IDs as a third argument, which means that layouts for all record types will be returned if record types are defined in your org for the specified sObject. After getting the layout, the sample writes the number of detail and edit sections found and their headings. Next, it iterates through each edit layout section and retrieves its components.

```
public void describeLayoutSample(){
  try {
      String objectToDescribe = "Account";
      DescribeLayoutResult dlr =
          connection.describeLayout(objectToDescribe, null, null);
      System.out.println("There are " + dlr.getLayouts().length +
          " layouts for the " + objectToDescribe + " object."
      );

      // Get all the layouts for the sObject
      for(int i = 0; i < dlr.getLayouts().length; i++) {
        DescribeLayout layout = dlr.getLayouts()[i];
        DescribeLayoutSection[] detailLayoutSectionList =
          layout.getDetailLayoutSections();
        System.out.println(" There are " +
          detailLayoutSectionList.length +
            " detail layout sections");
        DescribeLayoutSection[] editLayoutSectionList =
          layout.getEditLayoutSections();
        System.out.println(" There are " +
          editLayoutSectionList.length +
```

```
        " edit layout sections");

      // Write the headings of the detail layout sections
      for(int j = 0; j < detailLayoutSectionList.length; j++) {
        System.out.println(j +
            " This detail layout section has a heading of " +
            detailLayoutSectionList[j].getHeading());
      }

      // Write the headings of the edit layout sections
      for(int x = 0; x < editLayoutSectionList.length; x++) {
        System.out.println(x +
            " This edit layout section has a heading of " +
            editLayoutSectionList[x].getHeading());
      }

      // For each edit layout section, get its details.
      for(int k = 0; k < editLayoutSectionList.length; k++) {
        DescribeLayoutSection els =
          editLayoutSectionList[k];
        System.out.println("Edit layout section heading: " +
            els.getHeading());
        DescribeLayoutRow[] dlrList = els.getLayoutRows();
          System.out.println("This edit layout section has " +
              dlrList.length + " layout rows.");
          for(int m = 0; m < dlrList.length; m++) {
            DescribeLayoutRow lr = dlrList[m];
            System.out.println(" This row has " +
                lr.getNumItems() + " layout items.");
            DescribeLayoutItem[] dliList = lr.getLayoutItems();
            for(int n = 0; n < dliList.length; n++) {
              DescribeLayoutItem li = dliList[n];
              if ((li.getLayoutComponents() != null) &&
                (li.getLayoutComponents().length > 0)) {
                System.out.println("\tLayout item " + n +
                    ", layout component: " +
                    li.getLayoutComponents()[0].getValue());
              }
              else {
              System.out.println("\tLayout item " + n +
                    ", no layout component");
              }
            }
          }
       }
    }

    // Get record type mappings
    if (dlr.getRecordTypeMappings() != null) {
      System.out.println("There are " +
          dlr.getRecordTypeMappings().length +
          " record type mappings for the " +
          objectToDescribe + " object"
      );
```

```
      } else {
        System.out.println(
            "There are no record type mappings for the " +
            objectToDescribe + " object."
        );
      }
    } catch (ConnectionException ce) {
      ce.printStackTrace();
    }
}
```

Sample Code—C#

This sample shows how to get the layouts of an Account sObject. It calls `describeLayout()` with the name of the sObject type to describe. It doesn't specify record type IDs as a third argument, which means that layouts for all record types will be returned if record types are defined in your org for the specified sObject. After getting the layout, the sample writes the number of detail and edit sections found and their headings. Next, it iterates through each edit layout section and retrieves its components.

```
public void describeLayoutSample()
{
    try
    {
        String objectToDescribe = "Account";
        DescribeLayoutResult dlr =
            binding.describeLayout(objectToDescribe, null, null);
        Console.WriteLine("There are " + dlr.layouts.Length +
            " layouts for the " + objectToDescribe + " object."
        );

        // Get all the layouts for the sObject
        for (int i = 0; i < dlr.layouts.Length; i++)
        {
            DescribeLayout layout = dlr.layouts[i];
            DescribeLayoutSection[] detailLayoutSectionList =
                layout.detailLayoutSections;
            Console.WriteLine(" There are " +
                detailLayoutSectionList.Length +
                " detail layout sections");
            DescribeLayoutSection[] editLayoutSectionList =
                layout.editLayoutSections;
            Console.WriteLine(" There are " +
                editLayoutSectionList.Length +
                " edit layout sections");

            // Write the headings of the detail layout sections
            for (int j = 0; j < detailLayoutSectionList.Length; j++)
            {
                Console.WriteLine(j +
                    " This detail layout section has a heading of " +
                    detailLayoutSectionList[j].heading);
            }

            // Write the headings of the edit layout sections
```

```
for (int x = 0; x < editLayoutSectionList.Length; x++)
{
    Console.WriteLine(x +
        " This edit layout section has a heading of " +
        editLayoutSectionList[x].heading);
}

// For each edit layout, get its details.
for (int k = 0; k < editLayoutSectionList.Length; k++)
{
    DescribeLayoutSection els =
        editLayoutSectionList[k];
    Console.WriteLine("Edit layout section heading: " +
            els.heading);
    DescribeLayoutRow[] dlrList = els.layoutRows;
    Console.WriteLine("This edit layout section has " +
            dlrList.Length + " layout rows.");
    for (int m = 0; m < dlrList.Length; m++)
    {
        DescribeLayoutRow lr = dlrList[m];
        Console.WriteLine(" This row has " +
            lr.numItems + " layout items.");
        DescribeLayoutItem[] dliList = lr.layoutItems;
        for (int n = 0; n < dliList.Length; n++)
        {
            DescribeLayoutItem li = dliList[n];
            if ((li.layoutComponents != null) &&
                    (li.layoutComponents.Length > 0))
            {
                Console.WriteLine("\tLayout item " + n +
                        ", layout component: " +
                    li.layoutComponents[0].value);
            }
            else
            {
                Console.WriteLine("\tLayout item " + n +
                        ", no layout component");
            }
        }
    }
}

// Get record type mappings
if (dlr.recordTypeMappings != null)
{
    Console.WriteLine("There are " +
        dlr.recordTypeMappings.Length +
        " record type mappings for the " +
        objectToDescribe + " object");
}
else
{
    Console.WriteLine(
        "There are no record type mappings for the " +
```

```
                    objectToDescribe + " object.");
            }
        }
    }
    catch (SoapException e)
    {
        Console.WriteLine("An unexpected error has occurred: " +
            e.Message + "\n" + e.StackTrace);
    }
}
```

Arguments

Name	Type	Description
sObjectType	string	The specified value must be a valid object for your organization. If the object is a person account, specify Account, or if it is a person contact, specify Contact.
layoutName	string	The specified value must be a valid named layout for this object. Layout names are obtained from `namedLayoutInfos` in DescribeSObjectResult. The entity name is not valid because the primary layout is not considered "named."
recordTypeIds	ID[]	Optional parameter restricts the layout data returned to the specified record types. To retrieve the layout for the master record type, specify the value `012000000000000AAA` for the `recordTypeIds` regardless of the object. This value is returned in the `recordTypeInfos` for the master record type in the DescribeSObjectResult. A SOQL query returns a null value, not `012000000000000AAA`. For information on IDs, see ID Field Type.

Response

DescribeLayoutResult

Faults

`InvalidSObjectFault`

`UnexpectedErrorFault`

SEE ALSO:

API Call Basics

https://developer.salesforce.com/page/Sample_SOAP_Messages

DescribeLayoutResult

The `describeLayout()` call returns a `DescribeLayoutResult` object containing top-level record type information about the passed-in `sObjectType`, as well as a mapping of record types to layouts. Your client application can traverse this object to retrieve detailed metadata about the layout.

Tip: If you have actions in the publisher enabled in your organization, you can retrieve the layout definition for a global publisher layout by using `Global` as the `sObjectType` and `null` as the `recordTypeId`.

Name	Type	Description
`feedView`	DescribeLayoutFeedView[]	Feed view related layout data for a feed-based layout. This field is null for page layouts that are not feed-based.
`layouts`	DescribeLayout[]	Layout(s) associated with the specified `sObjectType`. In general, there is a one-to-one correspondence between layouts and objects. However, in some cases, an object will have multiple layouts in the context of a given user profile.
`recordTypeMappings`	RecordTypeMapping[]	Record type mapping(s) available for the user. The objects on a user profile can have multiple record types. All record types are returned, not just those available to the calling user. This allows the client application to display a layout appropriate for a given user profile. For example, suppose User A owns a record, and this record has record type X set. If User B tries to view this record, then the client application can display the record using the layout associated with this record type for User B's profile (even if the record type is not available for the user).
`recordTypeSelectorRequired`	boolean	If `true`, a record type selector page is required; if `false`, use the default record type.

DescribeLayout

Represents a specific layout for the specified `sObjectType`. Each `DescribeLayout` is referenced by its unique layout ID and consists of two types of views (represented in this object as arrays of DescribeLayoutSection):

- **Detail view**—Read-only display of the object. In a detail layout, certain pieces of information (such as address details) might be aggregated into a single DescribeLayoutItem.
- **Edit view**—Editable display of the object. In an edit layout, individual pieces of information (such as an address) will be broken up into separate fields.

An individual DescribeLayout consists of these fields:

Name	Type	Description
`buttonLayoutSection`	DescribeLayoutButtonSection	Standard and custom button sections associated with the specified layout.
`detailLayoutSections`	DescribeLayoutSection[]	Layout section(s) for the detail view.
`editLayoutSections`	DescribeLayoutSection[]	Layout section(s) for the edit view.

Name	Type	Description
highlightsPanelLayoutSection	DescribeLayoutSection[]	Layout section(s) for the highlights panel view.
multirowEditLayoutSections	DescribeLayoutSection[]	Layout section(s) for the multiline layout view. This field is available in API version 35.0 and later.
id	ID	Unique ID of this layout. For information on IDs, see ID Field Type.
quickActionList	DescribeQuickActionListResult	List of actions associated with the specified layout. This field is available in API version 28.0 and later.
relatedContent	RelatedContent	Mobile Cards section associated with the specified layout. This field is available in API version 29.0 and later.
relatedLists	RelatedList[]	Related list(s) associated with the specified layout.
saveOptions	DescribeLayoutSaveOption[]	List of save options for the layout.

DescribeLayoutButtonSection

Represents one of two sections of the layout containing either standard or custom buttons.

Name	Type	Description
detailButtons	DescribeLayoutButton[]	Standard or custom button(s) associated with the specified button section.

DescribeLayoutButton

Represents a single standard button, custom button, or custom link in a DescribeLayout.

Name	Type	Description
behavior	WebLinkWindowType	What the button or link does when clicked, such as execute JavaScript or open its content source in a new window, for example. This field is available in API version 31.0 and later.
colors	DescribeColor[]	Array of color information for icons associated with this button or link. Each color is associated with a theme. This field is available in API version 32.0 and later.
content	string	The API name of the Visualforce page or s-control being delivered. This field is available in API version 31.0 and later.
contentSource	WebLinkType	The content source of the custom button or link. The contentSource for a standard button which hasn't been overridden is null. This field is available in API version 31.0 and later.

Name	Type	Description
custom	boolean	Required. Indicates whether this is a custom button or link (true) or not (false).
encoding	string	Type of encoding assigned to the URL called by the button or link. Valid values are: • UTF-8—Unicode (UTF-8) • ISO-8859-1—General US & Western Europe (ISO-8859–1, ISO-LATIN-1) • Shift_JIS—Japanese (Shift-JIS) • ISO-2022-JP—Japanese (JIS) • EUC-JP—Japanese (EUC-JP) • x-SJIS_0213—Japanese (Shift-JIS_2004) • ks_c_5601-1987—Korean (ks_c_5601-1987) • Big5—Traditional Chinese (Big5) • GB2312—Simplified Chinese (GB2312) • Big5-HKSCS—Traditional Chinese Hong Kong (Big5–HKSCS) This field is available in API version 31.0 and later.
height	int	The height (in pixels) when a button or link's behavior field value is set to newWindow, sidebar, or noSidebar. This field is available in API version 31.0 and later.
icons	DescribeIcon[]	Array of icons for this button or link. Each icon is associated with a theme. This field is available in API version 29.0 and later.
label	string	Label for the button or link displayed in the Salesforce user interface.
menubar	boolean	Indicates whether the menu bar displays (true) or not (false) when a button or link's behavior field value is set to newWindow. This field is available in API version 31.0 and later.
name	string	API name of the button or link.
overridden	boolean	Required. Indicates whether a standard button has been overridden (true) or not (false). This field is available in API version 31.0 and later.
resizeable	boolean	Indicates whether the new window is resizeable (true) or not (false) when a button or link's behavior field value is set to newWindow. This field is available in API version 31.0 and later.

Name	Type	Description
scrollbars	boolean	Indicates whether scrollbars display (true) or not (false) when a button or link's behavior field value is set to newWindow. This field is available in API version 31.0 and later.
showsLocation	boolean	Indicates whether the address bar displays (true) or not (false) when a button or link's behavior field value is set to newWindow. This field is available in API version 31.0 and later.
showsStatus	boolean	Indicates whether the status bar displays (true) or not (false) when a button or link's behavior field value is set to newWindow. This field is available in API version 31.0 and later.
toolbar	boolean	Indicates whether the toolbars display (true) or not (false) when a button or link's behavior field value is set to newWindow. This field is available in API version 31.0 and later.
url	string	The URL called by the button or link. This field is null for standard buttons in a related list. This field is available in API version 31.0 and later.
width	int	The width (in pixels) when a button or link's behavior field value is set to newWindow. This field is available in API version 31.0 and later.
windowPosition	WebLinkPosition	Indicates the window position when a button or link's behavior field value is set to newWindow. This field is available in API version 31.0 and later.

DescribeLayoutComponent

Represents the smallest unit in a layout—a field or a separator. To reference a field for display, a client application uses the following notation to reference a field in the `describeSObjects()` call: `LayoutComponent.fieldName`.

In API version 31.0 and later, DescribeLayoutComponent is extended with FieldLayoutComponent if both the LayoutComponentType value is `Field`, and the field being described is either the compound field `Address` or the compound field `Person Name`.

Name	Type	Description
displayLines	int	The number of vertical lines displayed for a field in the edit view. Applies to textarea and multi-select picklist fields.
tabOrder	int	Indicates the tab order for the item in the row.

Name	Type	Description
type	LayoutComponentType	The LayoutComponentType for this LayoutComponent.
value	string	Value of this LayoutComponent. The name of the field if the LayoutComponentType value is Field. The API name of the canvas app if the LayoutComponentType value is Canvas.

DescribeLayoutFeedFilter

Represents an individual feed filter option that you can use to filter the feed.

Name	Type	Description
label	string	The label of the filter.
name	string	The API name of the filter.
type	FeedLayoutFilterType enum	Standard feed filter types: • AllUpdates • FeedItemType

DescribeLayoutFeedView

Represents the layout of the feed view for a feed-based page layout.

Name	Type	Description
feedFilters	DescribeLayoutFeedFilter[]	Lists the feed filter options that are displayed with the feed.

DescribeLayoutItem

Represents an individual item in a DescribeLayoutRow. A DescribeLayoutItem consists of a set of components (DescribeLayoutComponent), each of which is either a field or a separator. For most fields on a layout, there is only one component per layout item. However, in a display-only view, the DescribeLayoutItem might be a composite of the individual fields (for example, an address can consist of street, city, state, country, and postal code data). On the corresponding edit view, each component of the address field would be split up into separate DescribeLayoutItems.

Name	Type	Description
editable	boolean	Indicates whether this DescribeLayoutItem can be edited (true) or not (false). This field is available in API version 30.0 and below. It was replaced by the editableForNew and editableForUpdate fields in API version 31.0.
editableForNew	boolean	Indicates whether a new DescribeLayoutItem can be edited when creating a new record (true) or not (false). This field is available in API version 31.0 and later.

Name	Type	Description
editableForUpdate	boolean	Indicates whether an existing DescribeLayoutItem can be edited when editing a record (true) or not (false). This field is available in API version 31.0 and later.
label	string	Label text for this DescribeLayoutItem.
layoutComponents	DescribeLayoutComponent[]	DescribeLayoutComponent for this DescribeLayoutItem.
placeholder	boolean	Indicates whether this DescribeLayoutItem is a placeholder (true) or not (false). If true, then this DescribeLayoutItem is blank.
required	boolean	Indicates whether this DescribeLayoutItem is required (true) or not (false). This is useful to know if, for example, you wanted to render required fields in a contrasting color (such as red).

DescribeLayoutRow

Represents a row in a DescribeLayoutSection. A DescribeLayoutRow consists of one or more DescribeLayoutItem objects. For each DescribeLayoutRow, a DescribeLayoutItem refers either to a specific field or to an "empty" DescribeLayoutItem (a DescribeLayoutItem that contains no DescribeLayoutComponent objects). An empty DescribeLayoutItem can be returned when a given DescribeLayoutRow is sparse (for example, containing more fields on the right column than on the left column). Where there are gaps in the layout, an empty DescribeLayoutItem is returned as a placeholder.

Name	Type	Description
layoutItems	DescribeLayoutItem[]	Refers to either a specific field or to an empty LayoutItem (a LayoutItem that contains no DescribeLayoutComponent objects).
numItems	int	Number of layoutItems. This information is redundant but, due to a bug in a popular SOAP toolkit, was required to avoid serialization problems.

DescribeLayoutSection

Represents a section of a DescribeLayout and consists of one or more columns and one or more rows (an array of DescribeLayoutRow).

Name	Type	Description
columns	int	Number of columns in this DescribeLayoutSection.
heading	string	Heading text (label) for this DescribeLayoutSection.
layoutRows	DescribeLayoutRow[]	Array of one or more DescribeLayoutRow objects.
parentLayoutId	ID	The ID of the layout upon which this DescribeLayoutSection resides. This field is available in API version 35.0 and later.
rows	int	Number of rows in this DescribeLayoutSection.

Name	Type	Description
`tabOrder`	string	Indicates the tab order for the fields in the section in the edit view. Valid values are: • LeftToRight • TopToBottom This field is available in API version 31.0 and later.
`useCollapsibleSection`	boolean	Indicates whether this DescribeLayoutSection is a collapsible section, also known as a “twistie” (`true`), or not (`false`).
`useHeading`	boolean	Indicates whether to display the `heading` (`true`) or not (`false`).

DescribeQuickActionListResult

Represents a list of actions assigned to the page layout. Available in API version 28.0 and later.

Name	Type	Description
`quickActionListItems`	DescribeQuickActionListItemResult[]	Array of zero or more QuickActionListItemResult objects.

DescribeQuickActionListItemResult

Represents a QuickAction assigned to the actions list for a page layout. Available in API version 28.0 and later.

Name	Type	Description
`colors`	DescribeColor[]	Array of color information. Each color is associated with a theme. This field is available in API version 29.0 and later.
`iconUrl`	string	The URL of the icon associated with the action. This icon URL corresponds to the 32x32 icon used for the current Salesforce theme, introduced in Spring ‘10.
`icons`	DescribeIcon[]	Array of icons for this action. Each icon is associated with a theme. This field is available in API version 29.0 and later.
`label`	string	The label of the action.
`miniIconUrl`	string	The URL of the mini icon associated with the action. This icon URL corresponds to the 16x16 icon used for the current Salesforce theme, introduced in Spring ‘10.
`quickActionName`	string	The API name of the action.
`targetSobjectType`	string	The API name of the action’s target object.
`type`	string	The QuickActionType of the action. Valid values are: • Create • VisualforcePage

CustomLinkComponent

When the LayoutComponentType value is `CustomLink`, this type contains information about a single custom link on the page layout.

Name	Type	Description
`customLink`	DescribeLayoutButton	A single LayoutComponent object of type `CustomLink`.

FieldLayoutComponent

Extends the information returned by DescribeLayoutComponent. When the LayoutComponentType value is `Field`, and the field being described is an `Address` or `Person Name` field, FieldLayoutComponent includes information about the field's components.

Available in API version 31.0 and later.

Name	Type	Description
`components`	DescribeLayoutComponent[]	Array of zero or more LayoutComponent objects of type `Field`.
`fieldType`	FieldType	The field type.

Sample Code for Usage of FieldLayoutComponent

```
        DescribeLayoutComponent layoutComponent = layoutComponents[n];
        // Look for a component representing the BillingAddress field
        if (layoutComponent.getType() == LayoutComponentType.Field.toString() &&
        layoutComponent.getValue().equals("BillingAddress") {
        // Cast this component as a FieldLayoutComponent
        DescribeLayoutComponent.FieldLayoutComponent addressFieldComponent =
(FieldLayoutComponent)layoutComponent;
        // At this point you can access addressFieldComponent
FieldLayoutComponent-specific methods such as getComponents() or
getFieldType()
        }
```

LayoutComponentType

Represents the type for a DescribeLayoutComponent. Contains one of these values:

- `AnalyticsCloud`—An Analytics Cloud dashboard on the page layout. Available in API version 34.0 and later.
- `Canvas`—A canvas component on the page layout. This layout component type is available in API version 31.0 and later.
- `CustomLink`—A custom link on the page layout.
- `EmptySpace`—A blank space on the page layout.
- `ExpandedLookup`—An Expanded Lookup component in the Mobile Cards section of the page layout.
- `Field`—Field name. A mapping to the `name` field on the describeSObjectResult.
- `ReportChart`—A report chart on the page layout.
- `SControl`—Reserved for future use.
- `Separator`—Separator character, such as a semicolon (:) or slash (/).

- VisualforcePage—A Visualforce component on the page layout.

PicklistForRecordType

Represents a single record type picklist in a RecordTypeMapping. The picklistName matches up with the name attribute of each field in the fields array in describeSObjectResult. The picklistValues are the set of acceptable values for the recordType.

Name	Type	Description
picklistName	string	Name of the picklist.
picklistValues	PicklistEntry[]	Set of picklist values associated with the recordTypeIds in the RecordTypeMapping. **Note:** If you retrieve picklistValues, the validFor value is null. If you need the validFor value, get it from the PicklistEntry object obtained from the Field object associated with the DescribeSObjectResult.

RecordTypeMapping

Represents a single record type mapping in the recordTypeMappings field in a DescribeLayoutResult object. This object is a map of valid recordTypeIds to layoutId. For displaying a detail view, a client application uses this mapping to determine which layout is associated with the record type on the record. For displaying an edit view, a client application uses this mapping to determine which layout to use (and possibly to allow the user to choose between multiple record types); it will also determine the set of available picklist values.

Name	Type	Description
available	boolean	Indicates whether this record type is available (true) or not (false). Availability is used to display a list of available record types to the user when they are creating a new record.
defaultRecordTypeMapping	boolean	Indicates whether this is the default record type mapping (true) or not (false).
layoutId	ID	ID of the layout associated with this record type.
name	string	Name of this record type.
picklistsForRecordType	PicklistForRecordType[]	Record type picklist(s) mapped to the recordTypeIds.
recordTypeId	ID	ID of this record type.

Note: Some fields previously in this result have moved to RecordTypeInfo.

RelatedContent

Represents the Mobile Cards section in a DescribeLayout. Available in API version 29.0 and later.

Name	Type	Description
relatedContentItems	DescribeRelatedContentItem[]	An array of items in the Mobile Cards section of the page layout.

DescribeRelatedContentItem

Represents an individual item in the DescribeRelatedContentItem list. Available in API version 29.0 and later.

Name	Type	Description
describeLayoutItem	DescribeLayoutItem	An individual layout item in the Mobile Cards section. Must be wrapped in a DescribeRelatedContentItem to be added to the Mobile Cards section.

RelatedList

Represents a single related list in a DescribeLayoutResult.

Name	Type	Description
buttons	DescribeLayoutButton[]	Buttons associated with this related list. This field is available in API version 32.0 and later.
columns	RelatedListColumn[]	Columns associated with this related list. You can pair this value with Field to achieve a number of useful tasks, including determining whether the field is: • A name field, in order to present a link to the detail • Sortable, (to allow the user to include it in an `ORDER BY` clause to sort the rows by the given column • A currency field, to include the currency symbol or code
custom	boolean	If `true`, this related list is custom.
field	string	Name of the field on the related (associated) object that establishes the relationship with the associating object. For example, for the Contact related list on Account, the value is `AccountId`.
label	string	Label for the related list, displayed in the Salesforce user interface.
limitRows	int	Number of rows to display.
name	string	Name of the ChildRelationship in the DescribeSObjectResult for the `sObjectType` which was provided as the argument to DescribeLayout.
sobject	string	Name of the `sObjectType` that is the row type for rows within this related list.
sort	RelatedListSort[]	If not null, the column(s) that should be used to order the related objects.

RelatedListColumn

Represents a single field in a related list returned by DescribeLayoutResult.

Name	Type	Description
`field`	string	API name of the field. This value is always of the form ***`object_type.field_name`***. For example, if `name` is `Contact.Account.Owner.Alias`, then this value is `User.Alias`.
`fieldApiName`	string	SOQL field syntax for the field in relation to the main sObject for the related list. This value is always of the form ***`object_type.field_name`***. Unlike `name`, it doesn't return a value in the Translate Returned SOQL Results format.
`format`	string	Display in date or dateTime format.
`label`	string	Label of the field.
`lookupId`	string	Optional SOQL field syntax to retrieve the lookup ID value for the main related list sObject. This value may be an expression that uses SOQL relationship query dot notation. For example, if the related list `sObjectType` is `Case` and the column display value is `Owner.Alias`, then the lookup ID value would be `Owner.Id`.
`name`	string	SOQL field syntax for the field in relation to the main sObject for the related list. This value may be an expression that uses SOQL relationship query dot notation, or it may use the Translate Returned SOQL Results or convertCurrency() format. For example, if the related list `sObjectType` is `Case`, then the value might be `Owner.Alias` or it might be `toLabel(Case.Status)`.

RelatedListSort

Represents the sorting preference for objects in the related list.

Name	Type	Description
`column`	string	Name of the field that is used to order the related objects.
`ascending`	boolean	If `true`, sort order is ascending. If `false`, descending.

Although in most cases there is only one RelatedListSort in the array, for some special standard related lists, there is more than one. If there is more than one, the RelatedListSorts are ordered according to how they should be included in a corresponding SOQL query, for example:

```
ORDER BY relatedListSort[0].getColumn() DIRECTION, relatedListSort[1].getColumn() DIRECTION
```

DescribeLayoutSaveOption

Represents the save options for the layout. Save options define behavior that occurs when objects are created or modified using the given layout. For example, for Cases and Leads, a "UseDefaultAssignmentRule" save option is exposed to control whether assignment rules are applied when Cases or Leads are created or edited.

Name	Type	Description
defaultValue	boolean	Default value for the save option. Controls whether the save option defaults to enabled or not in the Salesforce user interface. For example, for the "UseDefaultAssignmentRule" save option, if defaultValue is true, then by default the system triggers the default assignment rules when an Account, Case, or Lead is created or edited. If false, then the default assignment rules aren't applied when an Account, Case, or Lead is created or edited, unless the user enables the save option in the Salesforce user interface.
isDisplayed	boolean	If true, then the save option is displayed in the layout. If false, then the save option isn't displayed in the layout.
label	string	Label for the save option that is displayed in the Salesforce user interface.
name	string	API name for the save option.
restHeaderName	string	The corresponding REST API header for the save option.
soapHeaderName	string	The corresponding SOAP API header for the save option.

WebLinkPosition

Represents the window position for a new window opened upon clicking a DescribeLayoutButton. Applies only to custom buttons. Available in API version 31.0 and later. Contains one of these values:

- fullScreen—The new window opens in a full screen. If this option is selected, any width or height parameters set for the new window are ignored.
- none—No window position preference is set.
- topLeft—The new window opens, positioned at the top left of the screen.

WebLinkType

Represents the content being delivered by the custom button. Contains one of these values:

- javascript
- page—Visualforce page
- sControl
- url

WebLinkWindowType

Represents the behavior for a DescribeLayoutButton. Applies only to custom buttons. Available in API version 31.0 and later. Contains one of these values:

- `newWindow`—The custom button's content opens in a new browser window.
- `noSidebar`—The custom button's content displays in the existing browser window without a sidebar.
- `onClickJavaScript`—Valid only when the DescribeLayoutButton's `contentSource` field value is `javascript`. Clicking the button or link executes JavaScript.
- `replace`—The custom button's content displays in the existing browser window without a sidebar or header.
- `sidebar`—The custom button's content displays in the existing browser window with a sidebar.

describePrimaryCompactLayouts()

Retrieves metadata about the primary compact layout for each of the specified object types. Information returned is limited to 100 objects.

Syntax

```
DescribeCompactLayout[] primaryCompactLayouts =
connection.describePrimaryCompactLayouts(string[] sObjectType)
```

Usage

Use this call to retrieve information about the primary compact layout for the given object types. This call returns metadata about a given primary compact layout. For more information about compact layouts, see the Salesforce Help.

Sample Code—Java

```
public void testDescribePrimaryCompactLayoutsSample() {
  try {
    String[] objectsToDescribe = new String[] {"Account","Lead"};
      DescribeCompactLayout[] primaryCompactLayouts =
connection.describePrimaryCompactLayouts(objectsToDescribe);

      for (int i = 0; i < primaryCompactLayouts.length; i++) {
        DescribeCompactLayout cLayout = primaryCompactLayouts[i];
        System.out.println(" There is a compact layout with name: " + cLayout.getName());


        // Write the objectType
        System.out.println(" This compact layout is the primary compact layout for: " +
cLayout.getObjectType());

        DescribeLayoutItem[] fieldItems = cLayout.getFieldItems();
        System.out.println(" There are " + fieldItems.length + " fields in this compact
layout.");

        // Write field items
```

```
        for (int j = 0; j < fieldItems.length; j++) {
          System.out.println(j + " This compact layout has a field with name: " +
fieldItems[j].getLabel());
        }

        DescribeLayoutItem[] imageItems = cLayout.getImageItems();
        System.out.println(" There are " + imageItems.length + " image fields in this
compact layout.");

        // Write the image items
        for (int j = 0; j < imageItems.length; j++) {
          System.out.println(j + " This compact layout has an image field with name: " +
imageItems[j].getLabel());
        }

        DescribeLayoutButton[] actions = cLayout.getActions();
        System.out.println(" There are " + actions.length + " buttons in this compact
layout.");

        // Write the action buttons
        for (int j = 0; j < actions.length; j++) {
          System.out.println(j + " This compact layout has a button with name: " +
actions[j].getLabel());
        }
      }

    } catch (ConnectionException ce) {
      ce.printStackTrace();
  }
}
```

Arguments

Name	Type	Description
sObjectTypes	string[]	An array of one or more objects. The specified values must be valid objects for your organization.

Response

DescribeCompactLayout

Faults

InvalidSObjectFault

UnexpectedErrorFault

describeQuickActions()

Retrieves details about specified actions.

Syntax

```
DescribeQuickActionResult[] = connection.describeQuickActions(string[] quickActionNames);
```

Usage

Use the `describeQuickActions()` call to retrieve details for specified actions. In API version 28.0, the `describeQuickActions()` call takes the action name in the form of *ParentEntity.ActionName*. In API version 29.0 and greater, it takes the action name in the form of *ContextEntity.ActionName*. Returns an array of DescribeQuickActionResult. You might first call `describeAvailableQuickActions()` for a list of actions available for a specified context and then use `describeQuickActions()` to obtain details about specific actions.

Note: In API version 46.0 and later, the `apiName` for a global quick action can include the prefix `Global.` in a `describeQuickActions()` request body. The request body also accepts global quick action API names without the prefix.

Sample—Java

This sample retrieves and displays publisher action details for a create action on the Account object.

```
public void example() throws Exception {
    DescribeQuickActionResult[] result =
        conn.describeQuickActions(new String[]
            { "Account.QuickCreateContact", "Account.QuickCreateTask" });
    for(DescribeQuickActionResult r : result) {
        assert r != null;
    DescribeQuickActionDefaultValue [] describeQuickActionDefaultValues =
r.getDefaultValues();
    for(DescribeQuickActionDefaultValue defaultValue : describeQuickActionDefaultValues)
{
        System.out.println("Target Object Field:  " + defaultValue.getField() );
        System.out.println("Target Object Field's default Value:  " +
defaultValue.getDefaultValue );
}
        System.out.println("Action name: " + r.getName());
        System.out.println("Action label: " + r.getLabel());
        System.out.println("ParentOrContext object: " + r.getSourceSobjectType());
        System.out.println("Target object: " + r.getTargetSobjectType());
        System.out.println("Target object record type: " + r.getTargetRecordTypeId());
        System.out.println("Relationship field: " + r.getTargetParentField());
        System.out.println("Quick action type: " + r.getType());
        System.out.println("VF page name for custom actions: " +
        r.getVisualforcePageName());
        System.out.println("Icon name: " + r.getIconName());
        System.out.println("Icon URL: " + r.getIconUrl());
        System.out.println("Mini icon URL: " + r.getMiniIconUrl());
        assert r.getLayout() != null;
        System.out.println("Height of VF page for custom actions: " + r.getHeight());
        System.out.println("Width of VF page for custom actions: " + r.getWidth());
    }
}
```

Arguments

Name	Type	Description
quickActions	string[]	An array of quick actions to be retrieved.

Response

DescribeQuickActionResult

DescribeQuickActionResult

The `describeQuickActions()` call returns an array of DescribeQuickActionResult objects. Each DescribeQuickActionResult object represents a quick action for a specified object.

Name	Type	Description
actionEnumOrId	string	The unique ID for the action. If the action doesn't have an ID, its API name is used. This field is available in API version 35.0 and later.
canvasApplicationName	string	The name of your Canvas application, if you use it.
colors	DescribeColor[]	Array of color information. Each color is associated with a theme. This field is available in API version 29.0 and later.
defaultValues	DescribeQuickActionDefaultValue[]	The action's default values.
height	int	The height in pixels of the action pane.
iconName	string	Name of icon used for the action. If a custom icon is not used, this value will not be set.
iconUrl	string	URL of icon used for the action. This icon URL corresponds to the 32x32 icon used for the current Salesforce theme, introduced in Spring '10, or the custom icon, if there is one.
icons	DescribeIcon[]	Array of icons. Each icon is associated with a theme. If no custom icon was associated with the quick action and the quick action creates a specific object, the icons will correspond to the icons used for the created object. For example, if the quick action creates an Account, the icon array will contain the icons used for Account. If a custom icon was associated with the quick action, the array will contain that custom icon. This field is available in API version 29.0 and later. API version 32.0 and later returns different icons than in earlier API versions.

Name	Type	Description
label	string	Label of the action.
layout	DescribeLayoutSection	The section of the layout where the action resides.
lightningComponentBundleId	ID	If type is LightningComponent, the ID of the Lightning component bundle called by the action. This field is available in API version 38.0 and later.
lightningComponentBundleName	string	If type is LightningComponent, the name of the Lightning component bundle called by the action. This field is available in API version 38.0 and later.
miniIconUrl	string	The icon's URL. This icon URL corresponds to the 16x16 icon used for the current Salesforce theme, introduced in Spring '10, or the custom icon, if there is one.
name	string	Name of the action.
contextSobjectType	string	The object used for the action. Named sourceSobjectType in version 29.0 and earlier.
showQuickActionVfHeader	boolean	Whether or not the Visualforce quick action header and footer should be shown. If set to false, then both the header containing the quick action title and the footer containing the Save and Cancel buttons aren't displayed.
targetParentField	string	The parent object type of the action. Links the target object to the parent object. For example, use Account if the target object is Contact and the parent object is Account.
targetRecordTypeId	ID	The record type of the target record.
targetSobjectType	string	The action's target object type.
type	string	The action's type. Valid values are: • Canvas • Create • Flow (This value is available as a Beta in API version 41.0 and later) • LightningComponent (This value is available in API version 38.0 and later.) • LogACall • Post • SendEmail (This value is available in API version 31.0 and later.) • SocialPost • Update • VisualforcePage

Name	Type	Description
visualforcePageName	string	If type is Visualforce, the page name of the associated page for the action.
visualforcePageUrl	string	If type is Visualforce, the URL of the associated page for the action.
width	int	If a custom action is created, this is the width in pixels of the action pane.

DescribeQuickActionDefaultValue

Represents the default values of fields to use in default layouts.

Name	Type	Description
defaultValue	string	The value of the auto-populated default action.
field	string	The field name of the action.

DescribeLayoutSection

Represents a section of a DescribeLayout and consists of one or more columns and one or more rows (an array of DescribeLayoutRow).

Name	Type	Description
columns	int	Number of columns in this DescribeLayoutSection.
heading	string	Heading text (label) for this DescribeLayoutSection.
layoutRows	DescribeLayoutRow[]	Array of one or more DescribeLayoutRow objects.
parentLayoutId	ID	The ID of the layout upon which this DescribeLayoutSection resides. This field is available in API version 35.0 and later.
rows	int	Number of rows in this DescribeLayoutSection.
tabOrder	string	Indicates the tab order for the fields in the section in the edit view. Valid values are: • LeftToRight • TopToBottom This field is available in API version 31.0 and later.
useCollapsibleSection	boolean	Indicates whether this DescribeLayoutSection is a collapsible section, also known as a “twistie” (true), or not (false).
useHeading	boolean	Indicates whether to display the heading (true) or not (false).

DescribeLayoutRow

Represents a row in a DescribeLayoutSection. A DescribeLayoutRow consists of one or more DescribeLayoutItem objects. For each DescribeLayoutRow, a DescribeLayoutItem refers either to a specific field or to an "empty" DescribeLayoutItem (a DescribeLayoutItem that contains no DescribeLayoutComponent objects). An empty DescribeLayoutItem can be returned when a given DescribeLayoutRow is sparse (for example, containing more fields on the right column than on the left column). Where there are gaps in the layout, an empty DescribeLayoutItem is returned as a placeholder.

Name	Type	Description
`layoutItems`	DescribeLayoutItem[]	Refers to either a specific field or to an empty LayoutItem (a LayoutItem that contains no DescribeLayoutComponent objects).
`numItems`	int	Number of `layoutItems`. This information is redundant but, due to a bug in a popular SOAP toolkit, was required to avoid serialization problems.

DescribeLayoutItem

Represents an individual item in a DescribeLayoutRow. A DescribeLayoutItem consists of a set of components (DescribeLayoutComponent), each of which is either a field or a separator. For most fields on a layout, there is only one component per layout item. However, in a display-only view, the DescribeLayoutItem might be a composite of the individual fields (for example, an address can consist of street, city, state, country, and postal code data). On the corresponding edit view, each component of the address field would be split up into separate DescribeLayoutItems.

Name	Type	Description
`editable`	boolean	Indicates whether this DescribeLayoutItem can be edited (`true`) or not (`false`). This field is available in API version 30.0 and below. It was replaced by the `editableForNew` and `editableForUpdate` fields in API version 31.0.
`editableForNew`	boolean	Indicates whether a new DescribeLayoutItem can be edited when creating a new record (`true`) or not (`false`). This field is available in API version 31.0 and later.
`editableForUpdate`	boolean	Indicates whether an existing DescribeLayoutItem can be edited when editing a record (`true`) or not (`false`). This field is available in API version 31.0 and later.
`label`	string	Label text for this DescribeLayoutItem.
`layoutComponents`	DescribeLayoutComponent[]	DescribeLayoutComponent for this DescribeLayoutItem.
`placeholder`	boolean	Indicates whether this DescribeLayoutItem is a placeholder (`true`) or not (`false`). If `true`, then this DescribeLayoutItem is blank.
`required`	boolean	Indicates whether this DescribeLayoutItem is required (`true`) or not (`false`). This is useful to know if, for example, you wanted to render required fields in a contrasting color (such as red).

DescribeLayoutComponent

Represents the smallest unit in a layout—a field or a separator. To reference a field for display, a client application uses the following notation to reference a field in the `describeSObjects()` call: `LayoutComponent.fieldName`.

Name	Type	Description
`displayLines`	int	The number of vertical lines displayed for a field in the edit view. Applies to `textarea` and multi-select picklist fields.
`tabOrder`	int	Indicates the tab order for the item in the row.
`type`	LayoutComponentType	The LayoutComponentType for this LayoutComponent.
`value`	string	Value of this LayoutComponent. The name of the field if the LayoutComponentType value is `Field`. The API name of the canvas app if the LayoutComponentType value is `Canvas`.

LayoutComponentType

Represents the type for a DescribeLayoutComponent.Contains one of these values:

- `AnalyticsCloud`—An Analytics Cloud dashboard on the page layout. Available in API version 34.0 and later.
- `Canvas`—A canvas component on the page layout. This layout component type is available in API version 31.0 and later.
- `CustomLink`—A custom link on the page layout.
- `EmptySpace`—A blank space on the page layout.
- `ExpandedLookup`—An Expanded Lookup component in the Mobile Cards section of the page layout.
- `Field`—Field name. A mapping to the `name` field on the describeSObjectResult.
- `ReportChart`—A report chart on the page layout.
- `SControl`—Reserved for future use.
- `Separator`—Separator character, such as a semicolon (:) or slash (/).
- `VisualforcePage`—A Visualforce component on the page layout.

describeSearchScopeOrder()

Retrieves an ordered list of the objects in a user's default global search scope.

Syntax

```
DescribeSearchScopeOrderResult[] describeSearchScopeOrderResults =
connection.describeSearchScopeOrder();
```

Usage

Use `describeSearchScopeOrder()` to retrieve an ordered list of objects in the default global search scope of a logged-in user. Global search keeps track of which objects the user interacts with and how often and arranges the search results accordingly. Objects used most frequently appear at the top of the list. The returned list reflects the object order in the user's default search scope, including any pinned objects on the user's search results page. This call is useful if you want to implement a custom search results page using the optimized global search scope.

Note: You must enable Chatter to enable global search.

Sample Code—Java

This sample shows how to retrieve the global search scope for a user and then iteratively display the name of each object in the scope.

```
public void describeSearchScopeOrderSample() {
  try {
    //Get the order of objects in search smart scope for the logged-in user
    DescribeSearchScopeOrderResult[] describeSearchScopeOrderResults =
        connection.describeSearchScopeOrder();
    //Iterate through the results and display the name of each object
    for (int i = 0; i < describeSearchScopeOrderResults.length; i++) {
      System.out.println(describeSearchScopeOrderResults[i].getName());
    }
  }
  catch(ConnectionException ce) {
    ce.printStackTrace();
  }
}
```

Arguments

None.

Response

An array of DescribeSearchScopeOrderResult objects

Fault

`UnexpectedErrorFault`

SEE ALSO:

API Call Basics

DescribeSearchScopeOrderResult

The `describeSearchScopeOrder()` call returns an array of `DescribeSearchScopeOrderResult` objects. Each `DescribeSearchScopeOrderResult` object represents an object in the user's global search scope. The list reflects the order of the objects in the user's scope, including any pinned objects. The `DescribeSearchScopeOrderResult` object has the following properties.

Name	Type	Description
keyPrefix	string	Three-character prefix code in the object ID. Object IDs are prefixed with three-character codes that specify the type of the object. For example, Account objects have a prefix of 001 and Opportunity objects have a prefix of 006. Note that a key prefix can sometimes be shared by multiple objects so it does not always uniquely identify an object.
name	string	Name of the object. English only.

describeSearchLayouts()

Retrieves the search result layout configuration for one or more objects.

Syntax

```
DescribeSearchLayoutResult[] = binding.describeSearchLayouts(string sObjectType[]);
```

Usage

Use `describeSearchLayouts()` to retrieve search layout information for one or more objects. This is handy when you want to create a custom search results page with the same layout settings as in Salesforce.

Sample

This sample shows how to retrieve the search result layout information for a list of objects.

```
public void describeSearchLayoutSample(String[] sObjectTypes) {
        try {
            // Get the search layout of Account and Group
            DescribeSearchLayoutResult[] searchLayoutResults =
connection.describeSearchLayouts(sObjectTypes);
            // Iterate through the results and display the label of each column
            for (int i = 0; i < sObjectTypes.length; i += 1) {
                String sObjectType = sObjectTypes[i];
                DescribeSearchLayoutResult result = searchLayoutResults[i];
                System.out.println("Top label for search results for " + sObjectType + "
is " + result.getLabel() + " and should display " + result.getLimitRows() + " rows");
                System.out.println("Column labels for search results for " + sObjectType
+ " are: ");
                for (DescribeColumn column : result.getSearchColumns()) {
                    System.out.println(column.getLabel());
                }
            }
        } catch (ConnectionException ce) {
            ce.printStackTrace();
        }
    }
```

Arguments

Name	Type	Description
`sObjectType`	string[]	The list of objects you want to obtain search result layout configuration for. For example, if the object is a person account, specify Account, or if it is a person contact, specify Contact. The specified values must be valid objects in your organization. For a complete list of standard objects, see Standard Objects.

Response

DescribeSearchLayoutResult

Faults

`InvalidSObjectFault`

`UnexpectedErrorFault`

DescribeSearchLayoutResult

The `describeSearchLayouts()` on page 3397 call returns an array of `DescribeSearchLayoutResult` objects. Each `DescribeSearchLayoutResult` object represents the search layout configuration for each object queried for. The `DescribeSearchLayoutResult` object has the following properties.

Name	Type	Description
`label`	string	The browser title used for the search results page.
`limitRows`	int	The maximum number of rows to be displayed in the first page of search results. This number can be changed by the administrator.
`searchColumns`	DescribeColumn on page 3398[]	The columns associated with the search results for this object.

DescribeColumn

Represents the columns in the search layout configuration for each DescribeSearchLayoutResult object returned by the `describeSearchLayouts()` on page 3397 call.

Name	Type	Description
`field`	string	Field reference in relation to the object it belongs to. For example, “Lead.Phone.”
`format`	string	Field data format. For example, “date”. This value can be null.
`label`	string	Display text for this field in the user interface. For example, “Company Phone” or just “Phone.”

`name`	string	Field name. Use this in your SOQL query or code. For example, “Name.”

`describeSObject()`

Describes metadata (field list and object properties) for the specified object.

Note: `describeSObjects()` supersedes `describeSObject()`. Use `describeSObjects()` instead of `describeSObject()`.

Syntax

```
DescribeSObjectResult = connection.describeSObject(string sObjectType);
```

Usage

Use `describeSObject()` to obtain metadata for a given object. You can first call `describeGlobal()` to retrieve a list of all objects for your organization, then iterate through the list and use `describeSObject()` to obtain metadata about individual objects.

Your client application must be logged in with sufficient access rights to retrieve metadata about your organization’s data. For more information, see Factors that Affect Data Access.

Sample Code—Java

This sample calls `describeSObject()` to perform describes on the Account sObject. It retrieves some properties of the sObject describe result, such as the sObject name, label, and fields. It then iterates through the fields and gets the field properties. For picklist fields, it gets the picklist values and for reference fields, it gets the referenced object names. The sample writes the retrieved sObject and field properties to the console.

```
public void describeSObjectSample() {
    try {
        // Make the describe call
        DescribeSObjectResult describeSObjectResult =
            connection.describeSObject("Account");

        // Get sObject metadata
        if (describeSObjectResult != null) {
          System.out.println("sObject name: " +
                  describeSObjectResult.getName());
        if (describeSObjectResult.isCreateable())
            System.out.println("Createable");

        // Get the fields
        Field[] fields = describeSObjectResult.getFields();
        System.out.println("Has " + fields.length + " fields");

        // Iterate through each field and gets its properties
        for (int i = 0; i < fields.length; i++) {
          Field field = fields[i];
```

```
            System.out.println("Field name: " + field.getName());
            System.out.println("Field label: " + field.getLabel());

            // If this is a picklist field, show the picklist values
            if (field.getType().equals(FieldType.picklist)) {
                PicklistEntry[] picklistValues =
                    field.getPicklistValues();
                if (picklistValues != null) {
                  System.out.println("Picklist values: ");
                  for (int j = 0; j < picklistValues.length; j++) {
                    if (picklistValues[j].getLabel() != null) {
                      System.out.println("\tItem: " +
                          picklistValues[j].getLabel()
                      );
                    }
                  }
                }
            }

            // If a reference field, show what it references
            if (field.getType().equals(FieldType.reference)) {
                System.out.println("Field references the " +
                        "following objects:");
                String[] referenceTos = field.getReferenceTo();
                for (int j = 0; j < referenceTos.length; j++) {
                    System.out.println("\t" + referenceTos[j]);
                }
            }
        }
      }
  } catch (ConnectionException ce) {
      ce.printStackTrace();
     }
}
```

Sample Code—C#

This sample calls `describeSObject()` to perform describes on the Account sObject. It retrieves some properties of the sObject describe result, such as the sObject name, label, and fields. It then iterates through the fields and gets the field properties. For picklist fields, it gets the picklist values and for reference fields, it gets the referenced object names. The sample writes the retrieved sObject and field properties to the console.

```
public void describeSObjectSample() {
    try {
        // Make the describe call
        DescribeSObjectResult describeSObjectResult =
            binding.describeSObject("Account");

        // Get sObject metadata
        if (describeSObjectResult != null) {
            Console.WriteLine("sObject name: " +
                    describeSObjectResult.name);
        if (describeSObjectResult.createable)
```

```
            Console.WriteLine("Createable");

        // Get the fields
        Field[] fields = describeSObjectResult.fields;
        Console.WriteLine("Has " + fields.Length + " fields");

        // Iterate through each field and gets its properties
        for (int i = 0; i < fields.Length; i++) {
            Field field = fields[i];
            Console.WriteLine("Field name: " + field.name);
            Console.WriteLine("Field label: " + field.label);

            // If this is a picklist field, show the picklist values
            if (field.type.Equals(fieldType.picklist)) {
                PicklistEntry[] picklistValues =
                    field.picklistValues;
                if (picklistValues != null) {
                    Console.WriteLine("Picklist values: ");
                    for (int j = 0; j < picklistValues.Length; j++) {
                        if (picklistValues[j].label != null) {
                        Console.WriteLine("\tItem: " +
                            picklistValues[j].label);
                        }
                    }
                }
            }

            // If a reference field, show what it references
            if (field.type.Equals(fieldType.reference)) {
                Console.WriteLine("Field references the " +
                      "following objects:");
                String[] referenceTos = field.referenceTo;
                for (int j = 0; j < referenceTos.Length; j++) {
                    Console.WriteLine("\t" + referenceTos[j]);
                }
            }
        }
        }
    } catch (SoapException e) {
        Console.WriteLine("An unexpected error has occurred: " +
            e.Message + "\n" + e.StackTrace);
    }
}
```

Arguments

Name	Type	Description
sObjectType	string	Object. The specified value must be a valid object for your organization. For a complete list of objects, see Standard Objects.

Response

DescribeSObjectResult

Faults

`InvalidSObjectFault`

`UnexpectedErrorFault`

SEE ALSO:

describeSObjects()

describeGlobal()

API Call Basics

Using the Partner WSDL

https://developer.salesforce.com/page/Sample_SOAP_Messages

describeSObjectResult

The `describeSObject()` call returns a `DescribeSObjectResult` object.

Note: `describeSObjects()` supersedes `describeSObject()`. Use `describeSObjects()` instead of `describeSObject()`.

describeSObjects()

An array-based version of `describeSObject()`; describes metadata (field list and object properties) for the specified object or array of objects.

Note: Use this call instead of `describeSObject()`.

Syntax

```
DescribeSObjectResult [] = connection.describeSObjects(string sObjectType[] );
```

Usage

Use `describeSObjects()` to obtain metadata for a given object or array of objects. You can first call `describeGlobal()` to retrieve a list of all objects for your organization, then iterate through the list and use `describeSObjects()` to obtain metadata about individual objects. The `describeSObjects()` call is limited to a maximum of 100 objects returned.

Your client application must be logged in with sufficient access rights to retrieve metadata about your organization's data. For more information, see Factors that Affect Data Access.

In organizations where person accounts are enabled, this call shows Accounts as not createable if the profile does not have access to any business account record types.

Sample Code—Java

This sample calls `describeSObjects()` to perform describes on account, contact, and lead. It iterates through the sObject describe results, gets the properties and fields for each sObject in the result, and writes them to the console. For picklist fields, it writes the picklist values. For reference fields, it writes the referenced object names.

```
public void describeSObjectsSample()
{
  try {
    // Call describeSObjectResults and pass it an array with
    // the names of the objects to describe.
    DescribeSObjectResult[] describeSObjectResults =
                         connection.describeSObjects(
                          new String[] { "account", "contact", "lead" });

    // Iterate through the list of describe sObject results
    for (int i=0;i < describeSObjectResults.length; i++)
    {
        DescribeSObjectResult desObj = describeSObjectResults[i];
        // Get the name of the sObject
        String objectName = desObj.getName();
        System.out.println("sObject name: " + objectName);

        // For each described sObject, get the fields
        Field[] fields = desObj.getFields();

        // Get some other properties
        if (desObj.getActivateable()) System.out.println("\tActivateable");

        // Iterate through the fields to get properties for each field
        for(int j=0;j < fields.length; j++)
        {
            Field field = fields[j];
            System.out.println("\tField: " + field.getName());
            System.out.println("\t\tLabel: " + field.getLabel());
            if (field.isCustom())
                System.out.println("\t\tThis is a custom field.");
            System.out.println("\t\tType: " + field.getType());
            if (field.getLength() > 0)
                System.out.println("\t\tLength: " + field.getLength());
            if (field.getPrecision() > 0)
                System.out.println("\t\tPrecision: " + field.getPrecision());

            // Determine whether this is a picklist field
            if (field.getType() == FieldType.picklist)
            {
                // Determine whether there are picklist values
                PicklistEntry[] picklistValues = field.getPicklistValues();
                if (picklistValues != null && picklistValues[0] != null)
                {
                    System.out.println("\t\tPicklist values = ");
                    for (int k = 0; k < picklistValues.length; k++)
                    {
                       System.out.println("\t\t\tItem: " + picklistValues[k].getLabel());
```

```
                    }
                }
            }

            // Determine whether this is a reference field
            if (field.getType() == FieldType.reference)
            {
                // Determine whether this field refers to another object
                String[] referenceTos = field.getReferenceTo();
                if (referenceTos != null && referenceTos[0] != null)
                {
                    System.out.println("\t\tField references the following objects:");
                    for (int k = 0; k < referenceTos.length; k++)
                    {
                        System.out.println("\t\t\t" + referenceTos[k]);
                    }
                }
            }
        }
    }
  } catch(ConnectionException ce) {
    ce.printStackTrace();
  }
}
```

Sample Code—C#

This sample calls `describeSObjects()` to perform describes on account, contact, and lead. It iterates through the sObject describe results, gets the properties and fields for each sObject in the result, and writes them to the console. For picklist fields, it writes the picklist values. For reference fields, it writes the referenced object names.

```
public void describeSObjectsSample()
{
    try
    {
    // Call describeSObjectResults and pass it an array with
    // the names of the objects to describe.
    DescribeSObjectResult[] describeSObjectResults =
                        binding.describeSObjects(
                        new string[] { "account", "contact", "lead" });

    // Iterate through the list of describe sObject results
    foreach (DescribeSObjectResult describeSObjectResult in describeSObjectResults)
    {
        // Get the name of the sObject
        String objectName = describeSObjectResult.name;
        Console.WriteLine("sObject name: " + objectName);

        // For each described sObject, get the fields
        Field[] fields = describeSObjectResult.fields;

        // Get some other properties
```

```
        if (describeSObjectResult.activateable) Console.WriteLine("\tActivateable");

        // Iterate through the fields to get properties for each field
        foreach (Field field in fields)
        {
            Console.WriteLine("\tField: " + field.name);
            Console.WriteLine("\t\tLabel: " + field.label);
            if (field.custom)
                Console.WriteLine("\t\tThis is a custom field.");
            Console.WriteLine("\t\tType: " + field.type);
            if (field.length > 0)
                Console.WriteLine("\t\tLength: " + field.length);
            if (field.precision > 0)
                Console.WriteLine("\t\tPrecision: " + field.precision);

            // Determine whether this is a picklist field
            if (field.type == fieldType.picklist)
            {
                // Determine whether there are picklist values
                PicklistEntry[] picklistValues = field.picklistValues;
                if (picklistValues != null && picklistValues[0] != null)
                {
                    Console.WriteLine("\t\tPicklist values = ");
                    for (int j = 0; j < picklistValues.Length; j++)
                    {
                        Console.WriteLine("\t\t\tItem: " + picklistValues[j].label);
                    }
                }
            }

            // Determine whether this is a reference field
            if (field.type == fieldType.reference)
            {
                // Determine whether this field refers to another object
                string[] referenceTos = field.referenceTo;
                if (referenceTos != null && referenceTos[0] != null)
                {
                    Console.WriteLine("\t\tField references the following objects:");
                    for (int j = 0; j < referenceTos.Length; j++)
                    {
                        Console.WriteLine("\t\t\t" + referenceTos[j]);
                    }
                }
            }
        }
    }
    }
    catch (SoapException e)
    {
        Console.WriteLine("An unexpected error has occurred: " + e.Message
            + "\n" + e.StackTrace);
    }
}
```

Arguments

The describeSObjects() call takes in an array of sObjects.

Name	Type	Description
sObjectType	string	Object. The specified value must be a valid object for your organization. For a complete list of objects, see Standard Objects.

Response

DescribeSObjectResult

Faults

InvalidSObjectFault

UnexpectedErrorFault

SEE ALSO:

- describeSObject()
- describeGlobal()
- API Call Basics
- Using the Partner WSDL

DescribeSObjectResult

The describeSObjects() call returns an array of DescribeSObjectResult objects. Each object has the following properties:

Name	Type	Description
activateable	boolean	Reserved for future use.
actionOverrides	ActionOverride[]	An array of action overrides. Action overrides replace the URLs specified in the urlDetail, urlEdit and urlNew fields. This field is available in API version 32.0 and later.
associateEntityType	string	If the object is associated with a parent object, the type of association it has to its parent, such as History. Otherwise, its value is null. Available in API version 50.0 and later.
associateParentEntity	string	If the object is associated with a parent object, the parent object it's associated with. Otherwise, its value is null. Available in API version 50.0 and later.
childRelationships	ChildRelationship[]	An array of child relationships, which is the name of the sObject that has a foreign key to the sObject being described.
compactLayoutable	boolean	Indicates that the object can be used in describeCompactLayouts().

Name	Type	Description
`createable`	boolean	Indicates whether the object can be created via the `create()` call (`true`) or not (`false`).
`custom`	boolean	Indicates whether the object is a custom object (`true`) or not (`false`).
`customSetting`	boolean	Indicates whether the object is a custom setting object (`true`) or not (`false`).
`dataTranslationEnabled`	boolean	Indicates whether data translation is enabled for the object (`true`) or not (`false`). Available in API version 49.0 and later.
`deepCloneable`	boolean	Reserved for future use.
`defaultImplementation`	string	Reserved for future use.
`deletable`	boolean	Indicates whether the object can be deleted via the `delete()` call (`true`) or not (`false`).
`deprecatedAndHidden`	boolean	Reserved for future use.
`extendedBy`	string	Reserved for future use.
`extendsInterfaces`	string	Reserved for future use.
`feedEnabled`	boolean	Indicates whether Chatter feeds are enabled for the object (`true`) or not (`false`). This property is available in API version 19.0 and later.
`fields`	Field[]	Array of fields associated with the object. The mechanism for retrieving information from this list varies among development tools.
`implementedBy`	string	Reserved for future use.
`implementsInterfaces`	string	Reserved for future use.
`isInterface`	boolean	Reserved for future use.
`keyPrefix`	string	Three-character prefix code in the object ID. Object IDs are prefixed with three-character codes that specify the type of the object. For example, Account objects have a prefix of `001` and Opportunity objects have a prefix of `006`. Note that a key prefix can sometimes be shared by multiple objects so it does not always uniquely identify an object. Use the value of this field to determine the object type of a parent in those cases where the child may have more than one object type as parent (polymorphic). For example, you may need to obtain the `keyPrefix` value for the parent of a Task or Event.
`label`	string	Label text for a tab or field renamed in the user interface, if applicable, or the object name, if not. For example, an organization representing a medical vertical might rename Account to `Patient`. Tabs and fields can be renamed in the Salesforce user interface. See the Salesforce online help for more information.
`labelPlural`	string	Label text for an object that represents the plural version of an object name, for example, “Accounts.”

Name	Type	Description
layoutable	boolean	Indicates whether the object supports the describeLayout() call (true) or not (false).
mergeable	boolean	Indicates whether the object can be merged with other objects of its type (true) or not (false). true for leads, contacts, and accounts.
mruEnabled	boolean	Indicates whether Most Recently Used (MRU) list functionality is enabled for the object (true) or not (false).
name	string	Name of the object. This is the same string that was passed in as the sObjectType parameter.
namedLayoutInfos	NamedLayoutInfo[]	The specific named layouts that are available for the objects other than the default layout.
networkScopeFieldName	string	The API name of the networkScopeField that scopes the entity to an Experience Cloud site. For most entities, the value of this property is null.
queryable	boolean	Indicates whether the object can be queried via the query() call (true) or not (false).
recordTypeInfos	RecordTypeInfo[]	An array of the record types supported by this object. The user need not have access to all the returned record types to see them here.
replicateable	boolean	Indicates whether the object can be replicated via the getUpdated() and getDeleted() calls (true) or not (false).
retrieveable	boolean	Indicates whether the object can be retrieved via the retrieve() call (true) or not (false).
searchable	boolean	Indicates whether the object can be searched via the search() call (true) or not (false).
searchLayoutable	boolean	Indicates whether search layout information can be retrieved via the describeSearchLayouts() call (true) or not (false).
supportedScopes	ScopeInfo	The list of supported scopes for the object. For example, Account might have supported scopes of "All Accounts", "My Accounts", and "My Team's Accounts".
triggerable	boolean	Indicates whether the object supports Apex triggers.
undeletable	boolean	Indicates whether an object can be undeleted using the undelete() call (true) or not (false).
updateable	boolean	Indicates whether the object can be updated via the update() call (true) or not (false).
urlDetail	string	URL to the read-only detail page for this object. Compare with urlEdit, which is read-write. Client applications can use this URL to redirect to, or access, the Salesforce user interface for standard and custom objects. To provide flexibility and allow for future enhancements, returned urlDetail values are dynamic. To ensure that client applications are forward compatible,

Name	Type	Description
		it is recommended that they use this capability where possible. Note that, for objects for which a stable URL is not available, this field is returned empty.
`urlEdit`	string	URL to the edit page for this object. For example, the `urlEdit` field for the Account object returns `https://`***`yourInstance`***`.salesforce.com/{ID}/e`. Substituting the `{ID}` field for the current object ID will return the edit page for that specific account in the Salesforce user interface. Compare with `urlDetail`, which is read-only. Client applications can use this URL to redirect to, or access, the Salesforce user interface for standard and custom objects. To provide flexibility and allow for future enhancements, returned `urlDetail` values are dynamic. To ensure that client applications are forward compatible, it is recommended that they use this capability where possible. Note that, for objects for which a stable URL is not available, this field is returned empty.
`urlNew`	string	URL to the new/create page for this object. Client applications can use this URL to redirect to, or access, the Salesforce user interface for standard and custom objects. To provide flexibility and allow for future enhancements, returned `urlNew` values are dynamic. To ensure that client applications are forward compatible, it is recommended that they use this capability where possible. Note that, for objects for which a stable URL is not available, this field is returned empty.

Note: The properties with a Boolean value indicate whether certain API calls can be used for an object. However, other factors, such as permissions, also affect whether such operations can be performed on the object.

ActionOverride

ActionOverride provides details about an action that replaces the default action pages for an object. For example, an object could be configured to replace the new/create page with a custom page. This type is available in API version 32.0 and later.

Name	Type	Description
`formFactor`	string	Represents the environment to which the action override applies. For example, a `Large` value in this field represents the Lightning Experience desktop environment, and is valid for Lightning pages and Lightning components. A `Small` value represents the Salesforce mobile app on a phone or tablet. This field is available in API version 37.0 and later.
`isAvailableInTouch`	boolean	Indicates whether the action override is available in the Salesforce mobile app (`true`) or not (`false`).
`name`	string	The name of the action that overrides the default action. For example, if the new/create page was overridden with a custom action, the name might be "New".

Name	Type	Description
pageId	reference	The ID of the page for the action override.
url	string	The URL of the item being used for the action override, such as a Visualforce page. Returns as null for Lightning page overrides.

ChildRelationship

The name of the sObject that has a foreign key to the sObject being described.

Name	Type	Description
cascadeDelete	boolean	Indicates whether the child object is deleted when the parent object is deleted (true) or not (false).
childSObject	string	The name of the object on which there is a foreign key back to the parent sObject.
deprecatedAndHidden	boolean	Reserved for future use.
field	string	The name of the field that has a foreign key back to the parent sObject.
junctionIdListNames	String[]	The names of the lists of junction IDs associated with an object. Each ID represents an object that has a relationship with the associated object. For more information on JunctionIdList fields, see Field Types on page 33.
junctionReferenceTo	String[]	A collection of object names that the polymorphic keys in the junctionIdListNames property can reference. You can query these object names.
relationshipName	string	The name of the relationship, usually the plural of the value in childSObject.
restrictedDelete	boolean	Indicates whether the parent object can't be deleted because it is referenced by a child object (true) or not (false).

Field

In the DescribeSObjectResult, the fields property contains an array of Field objects. Each field represents a field in an API object. The array contains only the fields that the user can view, as defined by the user's field-level security settings.

Name	Type	Description
autonumber	boolean	Indicates whether this field is an autonumber field (true) or not (false). Analogous to a SQL IDENTITY type, autonumber fields are read only, non-createable text fields with a maximum length of 30 characters. Autonumber fields are read-only fields used to provide a unique ID that is independent of the internal object ID (such as a purchase order number or invoice number).

Name	Type	Description
		Autonumber fields are configured entirely in the Salesforce user interface. The API provides access to this attribute so that client applications can determine whether a given field is an autonumber field.
`byteLength`	int	For variable-length fields (including binary fields), the maximum size of the field, in bytes.
`calculated`	boolean	Indicates whether the field is a custom formula field (`true`) or not (`false`). Note that custom formula fields are always read-only.
`caseSensitive`	boolean	Indicates whether the field is case sensitive (`true`) or not (`false`).
`controllerName`	string	The name of the field that controls the values of this picklist. It only applies if `type` is `picklist` or `multipicklist` and `dependentPicklist` is true. See About Dependent Picklists. The mapping of controlling field to dependent field is stored in the `validFor` attribute of each `PicklistEntry` for this picklist. See `validFor`.
`createable`	boolean	Indicates whether the field can be created (`true`) or not (`false`). If `true`, then this field value can be set in a `create()` call.
`custom`	boolean	Indicates whether the field is a custom field (`true`) or not (`false`).
`dataTranslationEnabled`	boolean	Indicates whether data translation is enabled for the field (`true`) or not (`false`). Available in API version 49.0 and later.
`defaultedOnCreate`	boolean	Indicates whether this field is defaulted when created (`true`) or not (`false`). If `true`, then Salesforce implicitly assigns a value for this field when the object is created, even if a value for this field is not passed in on the `create()` call. For example, in the Opportunity object, the `Probability` field has this attribute because its value is derived from the `Stage` field. Similarly, the `Owner` has this attribute on most objects because its value is derived from the current user (if the `Owner` field is not specified).
`defaultValueFormula`	string	The default value specified for this field if the formula is not used. If no value has been specified, this field is not returned.
`dependentPicklist`	boolean	Indicates whether a picklist is a dependent picklist (`true`) where available values depend on the chosen values from a controlling field, or not (`false`). See About Dependent Picklists.
`deprecatedAndHidden`	boolean	Reserved for future use.
`digits`	int	For fields of type integer. Maximum number of digits. The API returns an error if an integer value exceeds the number of digits.
`displayLocationInDecimal`	boolean	Indicates how the geolocation values of a Location custom field appears in the user interface. If `true`, the geolocation values appear in decimal notation. If `false`, the geolocation values appear as degrees, minutes, and seconds.
`encrypted`	boolean	Note: This page is about Shield Platform Encryption, not Classic Encryption. What's the difference?

Name	Type	Description
		Indicates whether this field is encrypted. This value only appears in the results of a `describeSObjects()` call when it is `true`; otherwise, it is omitted from the results. This field is available in API version 31.0 and later.
`extraTypeInfo`	string	If the field is a `textarea` field type, indicates if the text area is plain text (`plaintextarea`) or rich text (`richtextarea`). If the field is a `url` field type, if this value is `imageurl`, the URL references an image file. Available on standard fields on standard objects only, for example, `Account.photoUrl`, `Contact.photoUrl`, and so on. If the field is a `reference` field type, indicates the type of external object relationship. Available on external objects only. • `null`—lookup relationship • `externallookup`—external lookup relationship • `indirectlookup`—indirect lookup relationship
`filterable`	boolean	Indicates whether the field is filterable (`true`) or not (`false`). If `true`, then this field can be specified in the `WHERE` clause of a query string in a `query()` call.
`filteredLookupInfo`	FilteredLookupInfo	If the field is a `reference` field type with a lookup filter, `filteredLookupInfo` contains the lookup filter information for the field. If there is no lookup filter, or the filter is inactive, this field is `null`. This field is available in API version 31.0 and later.
`formula`	string	The formula specified for this field. If no formula is specified for this field, it is not returned.
`groupable`	boolean	Indicates whether the field can be included in the `GROUP BY` clause of a SOQL query (`true`) or not (`false`). See GROUP BY in the *Salesforce SOQL and SOSL Reference Guide*. Available in API version 18.0 and later.
`highScaleNumber`	boolean	Indicates whether the field stores numbers to 8 decimal places regardless of what's specified in the field details (`true`) or not (`false`). Used to handle currencies for products that cost fractions of a cent, in large quantities. If high-scale unit pricing isn't enabled in your organization, this field isn't returned.Available in API version 33.0 and later.
`htmlFormatted`	boolean	Indicates whether a field such as a hyperlink custom formula field has been formatted for HTML and should be encoded for display in HTML (`true`) or not (`false`). Also indicates whether a field is a custom formula field that has an `IMAGE` text function.
`idLookup`	boolean	Indicates whether the field can be used to specify a record in an `upsert()` call (`true`) or not (`false`).
`inlineHelpText`	string	The text that displays in the field-level help hover text for this field. Note: This property is not returned unless at least one field on the object contains a value. When at least one field has field-level help, all fields on

Name	Type	Description
		the object list the property with either the field-level help value or null for fields that have blank field-level help.
label	string	Text label that is displayed next to the field in the Salesforce user interface. This label can be localized.
length	int	Returns the maximum size of the field in Unicode characters (not bytes) or 255, whichever is less. The maximum value returned by the getLength() property is 255. Available in API version 49.0 and later.
mask	string	Reserved for future use.
maskType	string	Reserved for future use.
name	string	Field name used in API calls, such as create(), delete(), and query().
nameField	boolean	Indicates whether this field is a name field (true) or not (false). Used to identify the name field for standard objects (such as AccountName for an Account object) and custom objects. Limited to one per object, except where FirstName and LastName fields are used (such as in the Contact object). If a compound name is present, for example the Name field on a person account, nameField is set to true for that record. If no compound name is present, FirstName and LastName have this field set to true.
namePointing	boolean	Indicates whether the field's value is the Name of the parent of this object (true) or not (false). Used for objects whose parents may be more than one type of object, for example a task may have an account or a contact as a parent.
nillable	boolean	Indicates whether the field is nillable (true) or not (false). A nillable field can have empty content. A non-nillable field must have a value in order for the object to be created or saved.
permissionable	boolean	Indicates whether FieldPermissions can be specified for the field (true) or not (false).
picklistValues	PicklistEntry[]	Provides the list of valid values for the picklist. Specified only if restrictedPicklist is true.
polymorphicForeignKey	boolean	Indicates whether the foreign key includes multiple entity types (true) or not (false).
precision	int	For fields of type double. Maximum number of digits that can be stored, including all numbers to the left and to the right of the decimal point (but excluding the decimal point character).
relationshipName	string	The name of the relationship, if this is a master-detail relationship field.
relationshipOrder	int	The type of relationship for a master-detail relationship field. Valid values are: • 0 if the field is the primary relationship • 1 if the field is the secondary relationship

Name	Type	Description
referenceTargetField	string	Applies only to indirect lookup relationships on external objects. Name of the custom field on the parent standard or custom object whose values are matched against the values of the child external object's indirect lookup relationship field. This matching is done to determine which records are related to each other. This field is available in API version 32.0 and later.
referenceTo	string[]	For fields that refer to other objects, this array indicates the object types of the referenced objects.
restrictedPicklist	boolean	Indicates whether the field is a restricted picklist (`true`) or not (`false`).
scale	int	For fields of type double. Number of digits to the right of the decimal point. The API silently truncates any extra digits to the right of the decimal point, but it returns a fault response if the number has too many digits to the left of the decimal point.
searchPrefilterable	boolean	Indicates whether a foreign key can be included in prefiltering (`true`) or not (`false`) when used in a SOSL **WHERE** clause. *Prefiltering* means to filter by a specific field value before executing the full search query. Available in API version 40.0 and later.
soapType	SOAPType	See SOAPType for a list of allowable values.
sortable	boolean	Indicates whether a query can sort on this field (`true`) or not (`false`).
type	FieldType	See FieldType for a list of allowable values.
unique	boolean	Indicates whether the value must be unique `true`) or not `false`).
updateable	boolean	Indicates one of the following: • Whether the field is updateable, (`true`) or not (`false`). If `true`, then this field value can be set in an `update()` call. • If the field is in a master-detail relationship on a custom object, indicates whether the child records can be reparented to different parent records (`true`), `false` otherwise.
writeRequiresMasterRead	boolean	This field only applies to master-detail relationships. Indicates whether a user requires read sharing access (`true`) or write sharing access (`false`) to the parent record to insert, update, and delete a child record. In both cases, a user also needs Create, Edit, and Delete object permissions for the child object.

FieldType

In the `Field` object associated with the DescribeSObjectResult, the `type` field can contain one of the following strings. For more information about field types, see Field Types.

type Field Value	What the Field Object Contains
string	String values.
boolean	Boolean (`true` / `false`) values.

type Field Value	What the Field Object Contains
int	Integer values.
double	Double values.
date	Date values.
datetime	Date and time values.
base64	Base64-encoded arbitrary binary data (of type base64Binary). Used for Attachment, Document, and Scontrol objects.
ID	Primary key field for the object. For information on IDs, see ID Field Type.
reference	Cross-references to a different object. Analogous to a foreign key field in SQL.
currency	Currency values.
textarea	String that is displayed as a multiline text field.
percent	Percentage values.
phone	Phone numbers. Values can include alphabetic characters. Client applications are responsible for phone number formatting.
url	URL values. Client applications should commonly display these as hyperlinks. If Field.extraTypeInfo is imageurl, the URL references an image, and can be displayed as an image instead.
email	Email addresses.
combobox	Comboboxes, which provide a set of enumerated values and allow the user to specify a value not in the list.
picklist	Single-select picklists, which provide a set of enumerated values from which only one value can be selected.
multipicklist	Multi-select picklists, which provide a set of enumerated values from which multiple values can be selected.
anyType	Values can be any of these types: string, picklist, boolean, int, double, percent, ID, date, dateTime, url, or email.
location	Geolocation values, including latitude and longitude, for custom geolocation fields on custom objects.

FilteredLookupInfo

In the Field object associated with the DescribeSObjectResult, the filteredLookupInfo field contains information about the lookup filter associated with the field.

This subtype is available in API version 31.0 and later.

Name	Type	Description
`controllingFields`	string[]	Array of the field's controlling fields when the lookup filter is dependent on the source object.
`dependent`	boolean	Indicates whether the lookup filter is dependent upon the source object (`true`) or not (`false`).
`optionalFilter`	boolean	Indicates whether the lookup filter is optional (`true`) or not (`false`).

SOAPType

The DescribeSObjectResult returns the `fields` property, which contains an array of fields whose value provides information about the object being described. One of those fields, `soapType`, contains one of the following string values. All of the values preceded by `xsd:` are XML schema primitive data types. For more information about the XML schema primitive data types, see the World Wide Web Consortium's publication *XML Schema Part 2: Data Types* at: `http://www.w3.org/TR/xmlschema-2/`.

Value	Description
`tns:ID`	Unique ID associated with an sObject. For information on IDs, see ID Field Type.
`xsd:anyType`	Can be ID, Boolean, double, integer, string, date, or dateTime.
`xsd:base64Binary`	Base 64-encoded binary data.
`xsd:boolean`	Boolean (`true` / `false`) values.
`xsd:date`	Date values.
`xsd:dateTime`	Date/time values.
`xsd:double`	Double values.
`xsd:int`	Integer values.
`xsd:string`	Character strings.

PicklistEntry

In the `Field` object associated with the DescribeSObjectResult, the `picklistValues` field contains an array of `PicklistEntry` properties. Each `PicklistEntry` can contain any one of the following string values. For more information, see Picklist Field Type.

Name	Type	Description
`active`	boolean	Indicates whether this item must be displayed (`true`) or not (`false`) in the drop-down list for the picklist field in the user interface.
`validFor`	byte[]	A set of bits where each bit indicates a controlling value for which this `PicklistEntry` is valid. See About Dependent Picklists.
`defaultValue`	boolean	Indicates whether this item is the default item (`true`) in the picklist or not (`false`). Only one item in a picklist can be designated as the default.
`label`	string	Display name of this item in the picklist.

Name	Type	Description
`value`	string	Value of this item in the picklist.

About Dependent Picklists

A dependent picklist works in conjunction with a controlling field to filter its values. The value chosen in the controlling field affects the values available in the dependent picklist.

A dependent picklist can be any custom picklist or multi-select picklist field that displays available values based on the value selected in its corresponding controlling field. A controlling field can be any standard or custom picklist (with at least one and less than 200 values) or checkbox field whose values control the available values in one or more corresponding dependent fields.

In the following example, the controlling picklist `Beverage` has two values, which relate to the values of the dependent picklist `Beverage Variety`:

Beverage	Beverage Variety
Coffee	Decaffeinated
	Regular
Tea	Chamomile
	Earl Grey
	English Breakfast

For each `PicklistEntry` that represents a value in a dependent picklist, the `validFor` attribute contains a set of bits. Each bit indicates a controlling field value for which the `PicklistEntry` is valid. Read the bits from left to right.

For more information on dependent picklists, see the "Dependent Picklists" topic in the Salesforce online help.

Sample Java Code for Dependent Picklists

```
public void dependentPicklistSample() {
  // inner class to decode a "validFor" bitset
  class Bitset {
    byte[] data;

    public Bitset(byte[] data) {
      this.data = data == null ? new byte[0] : data;
    }

    public boolean testBit(int n) {
      return (data[n >> 3] & (0x80 >> n % 8)) != 0;
    }

    public int size() {
      return data.length * 8;
    }
  }
```

```
  try {
    DescribeSObjectResult describeSObjectResult = connection.describeSObject("Case");
    Field[] fields = describeSObjectResult.getFields();
    // create a map of all fields for later lookup
    Map fieldMap = new HashMap();
    for (int i = 0; i < fields.length; i++) {
      fieldMap.put(fields[i].getName(), fields[i]);
    }
    for (int i = 0; i < fields.length; i++) {
      // check whether this is a dependent picklist
      if (fields[i].getDependentPicklist()) {
        // get the controller by name
        Field controller = (Field)fieldMap.get(fields[i].getControllerName());
        System.out.println("Field '" + fields[i].getLabel() + "' depends on '" +
        controller.getLabel() + "'");
        PicklistEntry[] picklistValues = fields[i].getPicklistValues();
        for (int j = 0; j < picklistValues.length; j++) {
          // for each PicklistEntry: list all controlling values for which it is valid
          System.out.println("Item: '" + picklistValues[j].getLabel() +
          "' is valid for: ");
          Bitset validFor = new Bitset(picklistValues[j].getValidFor());
          if (FieldType.picklist == controller.getType()) {
            // if the controller is a picklist, list all
            // controlling values for which this entry is valid
            for (int k = 0; k < validFor.size(); k++) {
              if (validFor.testBit(k)) {
                // if bit k is set, this entry is valid for the
                // for the controlling entry at index k
                System.out.println(controller.getPicklistValues()[k].getLabel());
              }
            }
          } else if (FieldType._boolean == controller.getType()) {
            // the controller is a checkbox
            // if bit 1 is set this entry is valid if the controller is checked
            if (validFor.testBit(1)) {
              System.out.println(" checked");
            }
            // if bit 0 is set this entry is valid if the controller is not checked
            if (validFor.testBit(0)) {
              System.out.println(" unchecked");
            }
          }
        }
      }
    }
  } catch (ConnectionException ce) {
    ce.printStackTrace();
  }
}
```

RecordTypeInfo

Base class for the old RecordTypeMapping object. This object contains all of the existing fields of RecordTypeMapping except layoutId and picklistForRecordType.

Name	Type	Description
`available`	boolean	Indicates whether this record type is available (`true`) or not (`false`). Availability is used to display a list of available record types to the user when they are creating a new record.
`defaultRecordTypeMapping`	boolean	Indicates whether this is the default record type mapping (`true`) or not (`false`).
`developerName`	string	Developer name of this record type. Available in API versions 43.0 and later.
`master`	boolean	Indicates whether this is the master record type (`true`) or not (`false`). The master record type is the default record type that's used when a record has no custom record type associated with it.
`name`	string	Name of this record type.
`recordTypeId`	ID	ID of this record type.

NamedLayoutInfo

The name of the named layout for the object. Standard objects can have defined named layouts which are separate from the primary layout for both the profile and the record type. For more information on layout names, see describeLayout().

Name	Type	Description
`name`	string	Name of this layout.

ScopeInfo

A scope for an object that can be used to filter object records. For example, Account may have a supported ScopeInfo of "mine" (with a UI label of "My accounts") which filters only Account records for the current user.

Name	Type	Description
`label`	string	UI label for this scope.
`name`	string	Name of this scope.

`describeSoftphoneLayout()`

Retrieves layout information for a Salesforce CRM Call Center Softphone.

Syntax

```
DescribeSoftphoneLayoutResult[] = connection.describeSoftphoneLayout();
```

Usage

Use this call to obtain information about the layout of a Softphone. Use only in the context of Salesforce CRM Call Center; do not call directly from client programs.

Arguments

This call does not take any objects.

Response

The response is a DescribeSoftphoneLayoutResult object:

Name	Type	Description
`callTypes`	DescribeSoftphoneLayoutCallType[]	A set of attributes associated with each allowed call type. A call type may be Inbound, Outbound, or Internal.
`id`	ID	ID of layout. Note that layout objects are not exposed via the API.
`name`	string	Name of the call type: Inbound, Outbound, or Internal.

DescribeSoftphoneLayoutCallType

Each DescribeSoftphoneLayoutResult object contains one or more call types:

Name	Type	Description
`infoFields`	DescribeSoftphoneLayoutInfoField[]	A set of information field in the softphone layout.
`name`	string	Name of the layout.
`screenPopOptions`	DescribeSoftphoneScreenPopOption[]	Settings in the softphone layout that specify how to display screen pops when the details of calls match or don't match existing records. This field is available in API version 18.0 and later.
`screenPopsOpenWithin`	string	Setting in the softphone layout that specify whether to display screen pops in a new browser window or tab when the details of calls match or don't match existing records. This field is available in API version 18.0 and later.
`sections`	DescribeSoftphoneLayoutSection[]	A set of object names and the corresponding item name in the softphone layout. There is one section for each object in a call type.

DescribeSoftphoneLayoutInfoField

An information field in the softphone layout.

Name	Type	Description
name	string	The name of an information field in the softphone layout that does not correspond to a Salesforce object. For example, caller ID may be specified in an information field. Information fields hold static information about the call type.

DescribeSoftphoneLayoutSection

Each call type returned in a DescribeSoftphoneLayoutResult object contains one section for each call type. Each section contains object-item pairs:

Name	Type	Description
entityApiName	string	The name of an object in the Salesforce application that corresponds to an item displayed in the softphone layout, for example, a set of accounts or cases.
items	DescribeSoftphoneLayoutItem[]	A set of softphone layout items.

DescribeSoftphoneLayoutItem

Each layout item corresponds to a record in Salesforce:

Name	Type	Description
itemApiName	string	The name of a record in the Salesforce application that corresponds to an item displayed in the softphone layout, for example, the Acme account.

DescribeSoftphoneScreenPopOption

Each call type returned in a DescribeSoftphoneLayoutResult object contains one `screenPopOptions` field for each call type. Each `screenPopOptions` field contains details about screen pop settings:

Name	Type	Description
matchType	string	Setting on a softphone layout to pop a screen for call details that match a single record, multiple records, or no records.
screenPopData	string	Setting on a softphone layout for a specific object or page to pop for a call's `matchType`. For example, pop a specified Visualforce page when the details of a call match a record.
screenPopType	picklist	Setting that specifies how to pop a screen for a call's `matchType`. For example, pop a detail page or don't pop any page when the details of a call match a record.

Sample Code—Java

This sample describes the soft phone layout and writes its properties to the console. It then gets the allowed call types. For each call type, it gets its information fields, layout sections, and the layout items in the layout sections. It writes these values to the console.

```
public void describeSoftphoneLayout() {
  try {
    DescribeSoftphoneLayoutResult result =
        connection.describeSoftphoneLayout();
    System.out.println("ID of retrieved Softphone layout: " +
        result.getId());
    System.out.println("Name of retrieved Softphone layout: " +
        result.getName());
    System.out.println("\nContains following " +
        "Call Type Layouts\n");
    for (DescribeSoftphoneLayoutCallType type :
          result.getCallTypes()) {
      System.out.println("Layout for " + type.getName() +
          " calls");
      System.out.println("\tCall-related fields:");
      for (DescribeSoftphoneLayoutInfoField field :
            type.getInfoFields()) {
        System.out.println("\t\t{" + field.getName());
      }
      System.out.println("\tDisplayed Objects:");
      for (DescribeSoftphoneLayoutSection section :
            type.getSections()) {
        System.out.println("\t\tFor entity " +
            section.getEntityApiName() +
            " following records are displayed:"
        );
        for (DescribeSoftphoneLayoutItem item :
              section.getItems()) {
          System.out.println("\t\t\t" + item.getItemApiName());
        }
      }
    }
  } catch (ConnectionException ce) {
    ce.printStackTrace();
  }
}
```

Sample Code—C#

This sample describes the soft phone layout and writes its properties to the console. It then gets the allowed call types. For each call type, it gets its information fields, layout sections, and the layout items in the layout sections. It writes these values to the console.

```
/// Demonstrates how to retrieve the layout information
/// for a Salesforce CRM Call Center Softphone
public void DescribeSoftphoneLayoutSample()
{
   try
   {
       DescribeSoftphoneLayoutResult dsplResult = binding.describeSoftphoneLayout();
```

```
        // Display the ID and Name of the layout
        Console.WriteLine("ID of retrieved Softphone layout: {0}", dsplResult.id);
        Console.WriteLine("Name of retrieved Softphone layout: {0}", dsplResult.name);

        // Display the contents of each Call Type
        Console.WriteLine("\nContains following Call Type Layouts\n");
        foreach (DescribeSoftphoneLayoutCallType dsplCallType in dsplResult.callTypes)
        {
            Console.WriteLine("Layout for {0} calls", dsplCallType.name);

            // Display the call-related fields contained in the call type
            Console.WriteLine("\tCall-related fields:");
            foreach (DescribeSoftphoneLayoutInfoField dsplInfoField
                in dsplCallType.infoFields)
            {
             Console.WriteLine("\t\t{0}", dsplInfoField.name);
            }

            // Display the objects that are included in the layout
            Console.WriteLine("\tDisplayed Objects:");
            foreach (DescribeSoftphoneLayoutSection dsplSection
                in dsplCallType.sections)
            {
                Console.WriteLine("\t\tFor entity {0} following records are displayed:",
                    dsplSection.entityApiName);
                foreach (DescribeSoftphoneLayoutItem dsplItem in dsplSection.items)
                {
                    Console.WriteLine("\t\t\t{0}", dsplItem.itemApiName);
                }
             }
        }
    }
    catch (SoapException e)
    {
        Console.WriteLine(e.Message);
        Console.WriteLine(e.StackTrace);
        Console.WriteLine(e.InnerException);
    }
}
```

describeSoqlListViews()

Retrieves the SOQL query and other information about a list view.

Syntax

```
connection.describeSoqlListViews(DescribeSoqlListViewsRequest request);
```

Usage

Use the `describeSoqlListViews()` call to retrieve information about a list view, including the ID, the columns, and the SOQL query. This call is useful if you want to use the SOQL that drives an existing list view in your custom application. This call is available in API version 32.0 and later.

Sample Code—Java

```
public void example() throws Exception {
        DescribeSoqlListViewsRequest request =
createDescribeSoqlListViewsRequest(listViewId, null);
        this.getClient().describeSoqlListViews(request);
      }
```

Arguments

Name	Type	Description
`request`	DescribeSoqlListViewsRequest	The fully qualified name or the ID of the list view and the object with which the list view is associated.

Response

A `DescribeSoqlListViewResult` object that contains one or more `DescribeSoqlListView` objects.

Faults

`InvalidSObjectFault`

`UnexpectedErrorFault`

DescribeSoqlListView

Contains information about the specified list view, including the columns, sObject type, and SOQL query.

The `DescribeSoqlListView` object has the following properties:

Name	Type	Description
`columns`	ListViewColumn[]	The columns that are returned by the list view query.
`id`	ID	The list view's fully qualified ID.
`orderBy`	ListViewOrderBy[]	A list of fields to sort results by, the sort order, and the position to which null values should be sorted.
`query`	string	The fully composed SOQL query for the list view.
`relatedEntityId`	ID	The ID of the campaign, if a campaign scope was used.

Name	Type	Description
scope	string	A filterScope to use for limiting the results.
scopeEntityId	ID	The ID of the queue or price book, if a queue or price book scope was used.
sobjectType	string	The object with which the list view is associated.
whereCondition	SoqlWhereCondition	Filter conditions on the list view. Filter conditions provide an additional level of control over which records get shown in the list view.

DescribeSoqlListViewParams

Use the DescribeSoqlListViewParams object with describeSoqlListViews() to retrieve the SOQL from a list view.

The DescribeSoqlListViewParams object has the following properties:

Name	Type	Description
developerNameOrId	string	The list view's ID or fully qualified developer name.
sobjectType	string	The API name of the sObject for the list view.

DescribeSoqlListViewResult

Contains one or more DescribeSoqlListView objects, each of which contains information about one or more list views, including the ID, sObject type, columns, and SOQL query of each.

The DescribeSoqlListViewResult object has the following properties:

Name	Type	Description
describeSoqlListViews	DescribeSoqlListView[]	Information about one or more list views, including the ID, sObject type, columns, and SOQL query of each.

DescribeSoqlListViewsRequest

EDITIONS

Available in: Salesforce Classic

Available in:

Use the DescribeSoqlListViewsRequest object with describeSoqlListViews() to retrieve information about a list view.

The DescribeSoqlListViewsRequest object has the following properties:

Name	Type	Description
listViewParams	DescribeSoqlListViewParams[]	A list of parameters that specify the list view to describe.

ListViewColumn

Contains metadata about a single list view column.

The `ListViewColumn` object is returned by the `describeSoqlListViews()` and `executeListView()` calls. It has the following properties:

Name	Type	Description
`ascendingLabel`	string	The localized type-specific label for sorting the column in ascending order. For example: "A-Z" for a text field, or "Low to High" for a numeric field. Set to null if the column isn't sortable.
`descendingLabel`	string	The localized type-specific label for sorting the column in ascending order. For example: "Z-A" for a text field, or "High to Low" for a numeric field. Set to null if the column is not sortable.
`fieldNameOrPath`	string	The field name or SOQL field path for the column.
`hidden`	boolean	If true, specifies that the column is not displayed, and is present only to support the display of other columns or other client-side logic.
`label`	string	The localized display label for the column.
`searchable`	boolean	Whether the column is searchable.
`selectListItem`	string	The SOQL SELECT item for the column. The item might differ from the field name or path, due to display formatting (for example, toLabel for picklists).
`sortDirection`	orderByDirection	An enumerated value, one of the following if the column is sortable: • ascending • descending Set to null if the column is not sortable.
`sortIndex`	int	The zero-based index that indicates the column's position within a multilevel sort, or null if the records are not sorted by the column.
`sortable`	boolean	Whether the column is sortable, in which case it might be referenced in the ExecuteListView orderBy parameter.
`type`	FieldType	The column data type.

ListViewOrderBy

Use the `ListViewOrderBy` object with `executeListView()` to determine the order in which records are returned from a list view.

The `ListViewOrderBy` object is returned by the `describeSoqlListViews()` call, is an optional input to the `executeListView()` call, and has the following properties:

Name	Type	Description
`fieldNameOrPath`	string	The field name or SOQL path of the field on which to sort the records.
`nullsPosition`	orderByNullsPosition	An enumerated value that determines where nulls are sorted in the results: • first • last

Name	Type	Description
`sortDirection`	orderByDirection	An enumerated value that determines the sort order of the results: • ascending • descending

SoqlWhereCondition

Contains information about SOQL filter conditions for a list view.

Each condition listed in SoqlWhereCondition represents a condition expression in a SOQL WHERE clause that compares a field value to a comparison value using a condition operator. Each condition contains the following properties.

Name	Type	Description
`field`	string	The object field used by the filter condition.
`operator`	soqlOperator	The filter operation. Operations include: • equals—Condition is true if the field value equals the specified value. String comparisons using the equals operator are case sensitive for unique case-sensitive fields and case insensitive for all other fields. • excludes—Condition is true for multi-select picklist fields if the selected field values are not in the list of condition values. • greaterThan—Condition is true if the field value is greater than the specified value. • greaterThenOrEqualTo—Condition is true if the field value is greater than or equal to the specified value. • in—Condition is true if the field value equals any specified value in the values list. • includes—Condition is true for multi-select picklist fields if the selected field values are in the list of condition values. • lessThan—Condition is true if the field value is less than the specified value. • lessThanOrEqualTo—Condition is true if the field value is less than or equal to the specified value. • like—Condition is true if the field value matches the specified value, using character matching logic described in Comparison Operators in the *SOQL and SOSL Reference*. • notEquals—Condition is true if the field value doesn't equal the specified value. • notIn—Condition is true if the field value doesn't equal any specified value in the values list. • notLike—Condition is true if the field value doesn't match the specified value using the character matching logic described in Comparison Operators in the *SOQL and SOSL Reference*. Available in API version 41.0 and later.

Name	Type	Description
		• within—Condition is true if the field value location is within the value distance using a location-based comparison. For more information, see Location-Based SOQL Queries in the *SOQL and SOSL Reference*.
`values`	string[]	A list of one or more values used to compare with the field value using the `operator` comparison logic.

Evaluating SoqlWhereConditions

In the SOAP API, Salesforce uses subclasses of SoqlWhereCondition to represent different categories of conditions. Use your development language's type comparison functionality (such as Java's `instanceof` operator) to determine which subclass is used for a particular instance of SoqlWhereCondition.

The SoqlConditionGroup subclass represents a group of SOQL WHERE clause conditions and uses the following properties.

Name	Type	Description
`conditions`	condition[]	List of filter conditions. If the list view uses filter logic, each logical filter group is represented with a conditions list.
`conjunction`	soqlConjunction	A conjunction operation that describes the filter logic to use for multiple conditions in a logical filter group. Values include: • and—All conditions must be true for the overall SoqlWhereCondition. • or—One of the conditions must be true for the overall SoqlWhereCondition.

The SoqlNotCondition subclass represents a special use of the `like` operator. In API version 40.0 and earlier, when evaluating a SoqlWhereCondition that was created using a `not like` operator (displayed as **does not contain** in the UI), the operator value in the condition is `like`. Salesforce also uses the SoqlNotCondition subclass of SoqlWhereCondition to represent the complete condition. The following example uses Java's `instanceof` operator to determine whether a `not like` operation is specified.

```
if (resultSoqlWhereCondition instanceof SoqlNotCondition) {
  // condition is really NOT condition
  // if operator is "like", this condition really means "not like"
  ...
}
```

In API version 41.0 and later, the `notLike` operator is used instead of SoqlNotCondition and a `like` operator. The `notLike` operator is available only for list views. You can't use it in SOQL queries used in other Salesforce features.

describeTabs()

Returns information about the standard and custom apps available to the logged-in user, as listed in the Lightning Platform app menu at the top of the page. An app is a set of tabs that works as a unit to provide application functionality. For example, two of the standard Salesforce apps are "Sales" and "Service."

Syntax

```
describeTabSetResult []  = connection.describeTabs();
```

Usage

Use the `describeTabs()` call to obtain information about the standard and custom apps to which the logged-in user has access. The `describeTabs()` call returns the minimum required metadata that can be used to render apps in another user interface. Typically this call is used by partner applications to render Salesforce data in another user interface.

For each app, the call returns the app name, the URL of the logo, whether or not it's the currently selected application for the user, and details about the tabs included in that app.

Important: The `describeTabs()` call returns information only about tabs that display in the Salesforce user interface for the logged-in user. If a user clicks the All Tabs (+) tab and hides some tabs from his Salesforce user interface, those user-hidden tabs aren't included in the set of tabs returned by `describeTabs()`.

Use the `describeAllTabs()` call to obtain information about all the tabs that are available to the logged-in user.

For each tab, the call returns the tab name, the primary sObject that's displayed on the tab, whether it's a custom tab, and the URL for viewing that tab. Note that the "All Tabs" tab and Lightning page tabs aren't included in the list of tabs.

Sample Code—Java

This sample calls `describeTabs()`, which returns an array of tab set results. Next, for each tab set result, which represents an app, it retrieves some of its properties and gets all the tabs for this app. It writes all retrieved properties to the console.

```
public void describeTabsSample() {
  try {
    // Describe tabs
    DescribeTabSetResult[] dtsrs = connection.describeTabs();
    System.out.println("There are " + dtsrs.length +
        " tab sets defined.");

    // For each tab set describe result, get some properties
    for (int i = 0; i < dtsrs.length; i++) {
      System.out.println("Tab Set " + (i + 1) + ":");
      DescribeTabSetResult dtsr = dtsrs[i];
      System.out.println("Label: " + dtsr.getLabel());
      System.out.println("\tLogo URL: " + dtsr.getLogoUrl());
      System.out.println("\tTab selected: " +
          dtsr.isSelected());

      // Describe the tabs for the tab set
      DescribeTab[] tabs = dtsr.getTabs();
      System.out.println("\tTabs defined: " + tabs.length);

      // Iterate through the returned tabs
      for (int j = 0; j < tabs.length; j++) {
        DescribeTab tab = tabs[j];
        System.out.println("\tTab " + (j + 1) + ":");
        System.out.println("\t\tName: " +
            tab.getSobjectName());
```

```
          System.out.println("\t\tLabel: " + tab.getLabel());
          System.out.println("\t\tURL: " + tab.getUrl());
          DescribeColor[] tabColors = tab.getColors();
          // Iterate through tab colors as needed
          DescribeIcon[] tabIcons = tab.getIcons();
          // Iterate through tab icons as needed
        }
      }
    } catch (ConnectionException ce) {
      ce.printStackTrace();
    }
}
```

Sample Code—C#

This sample calls `describeTabs()`, which returns an array of tab set results. Next, for each tab set result, which represents an app, it retrieves some of its properties and gets all the tabs for this app. It writes all retrieved properties to the console.

```
public void describeTabsSample() {
    try {
      // Describe tabs
      DescribeTabSetResult[] dtsrs = binding.describeTabs();
      Console.WriteLine("There are " + dtsrs.Length +
          " tab sets defined.");

      // For each tab set describe result, get some properties
      for (int i = 0; i < dtsrs.Length; i++) {
          Console.WriteLine("Tab Set " + (i + 1) + ":");
          DescribeTabSetResult dtsr = dtsrs[i];
          Console.WriteLine("Label: " + dtsr.label);
          Console.WriteLine("\tLogo URL: " + dtsr.logoUrl);
          Console.WriteLine("\tTab selected: " +
              dtsr.selected);

          // Describe the tabs for the tab set
          DescribeTab[] tabs = dtsr.tabs;
          Console.WriteLine("\tTabs defined: " + tabs.Length);

          // Iterate through the returned tabs
          for (int j = 0; j < tabs.Length; j++) {
              DescribeTab tab = tabs[j];
              Console.WriteLine("\tTab " + (j + 1) + ":");
              Console.WriteLine("\t\tName: " +
                  tab.sobjectName);
              Console.WriteLine("\t\tLabel: " + tab.label);
              Console.WriteLine("\t\tURL: " + tab.url);
              DescribeColor[] tabColors = tab.colors;
              // Iterate through tab colors as needed
              DescribeIcon[] tabIcons = tab.icons;
              // Iterate through tab icons as needed
          }
      }
    } catch (SoapException e) {
```

```
        Console.WriteLine("An unexpected error has occurred: " +
                    e.Message + "\n" + e.StackTrace);
    }
}
```

Arguments

None.

Response

describeTabSetResult, DescribeTab

SEE ALSO:

- API Call Basics
- Using the Partner WSDL
- DescribeTab
- describeTabSetResult

describeTabSetResult

The `describeTabs()` call returns an array of `DescribeTabSetResult` objects, which has the following properties:

Name	Type	Description
`description`	string	The description for this standard or custom app.
`label`	string	The display label for this standard or custom app. This value changes when tabs are renamed in the Salesforce user interface. See the Salesforce online help for more information.
`logoUrl`	string	A fully qualified URL to the logo image associated with the standard or custom app.
`namespace`	string	If this is a custom app, and a set of tabs in the custom app was installed as part of a managed package, the value of this attribute is the developer namespace prefix that the creator of the package chose when the Developer Edition organization was enabled to allow publishing a managed package. This attribute identifies elements of a Salesforce AppExchange package.
`selected`	boolean	If `true`, then this standard or custom app is the user's currently selected app.
`tabs`	DescribeTab	An array of tabs that are displayed for the specified standard app or custom app.

DescribeColor

DescribeColor contains color metadata information for a tab. The `describeTabs()` call returns an array of DescribeTabSetResult values. Each DescribeTabSetResult contains an array of DescribeTab values, and each DescribeTab contains an array of DescribeColor values.

Each DescribeColor is associated with a Salesforce user interface theme. For more information on themes, see Identifying the Salesforce Style Your Users See in the Visualforce Developer's Guide.

Color information can also be retrieved via the `describeTheme()` and `describeGlobalTheme()` calls. These calls return information on colors used for each object in your organization that can use theme icons and colors.

Name	Type	Description
`color`	string	The color described in web color RGB format—for example, “00FF00”.
`context`	string	The color context, which determines whether the color is the main color (or primary) for the tab.
`theme`	string	The associated theme. Possible values include: • *`theme2`*—Theme used prior to Spring ’10, called the “Salesforce Classic 2005 user interface theme” • *`theme3`*—Theme introduced in Spring ’10, called the “Salesforce Classic 2010 user interface theme” • *`theme4`*—Theme introduced in Winter ’14 for the mobile touchscreen version of Salesforce, and in Winter ’16 for Lightning Experience • *`custom`*—Theme associated with a custom icon

DescribeIcon

DescribeIcon contains icon metadata information for a tab. The `describeTabs()` call returns an array of DescribeTabSetResult values. Each DescribeTabSetResult contains an array of DescribeTab values, and each DescribeTab contains an array of DescribeIcon values.

Icon information can also be retrieved via the `describeTheme()` and `describeGlobalTheme()` calls. These calls return information on icons used for each object in your organization that can use theme icons and colors.

Name	Type	Description
`contentType`	string	The tab icon’s content type, for example, “image/png.”
`height`	int	The tab icon’s height in pixels. If the icon content type is an SVG type, height and width values are not used.
`theme`	string	The associated theme. Possible values include: • *`theme2`*—Theme used prior to Spring ’10, called the “Salesforce Classic 2005 user interface theme” • *`theme3`*—Theme introduced in Spring ’10, called the “Salesforce Classic 2010 user interface theme” • *`theme4`*—Theme introduced in Winter ’14 for the mobile touchscreen version of Salesforce, and in Winter ’16 for Lightning Experience • *`custom`*—Theme associated with a custom icon
`url`	string	The fully qualified URL for this icon.

Name	Type	Description
`width`	int	The tab icon's width in pixels. If the icon content type is an SVG type, height and width values are not used.

DescribeTab

The `describeTabs()` call returns a describeTabSetResult object, of which DescribeTab is a property:

Name	Type	Description
`colors`	DescribeColor[]	Array of color information used for a tab. This field is available in API version 29.0 and later.
`custom`	boolean	`true` if this is a custom tab, `false` if this is a standard tab.
`iconUrl`	string	The URL for the main 32x32 pixel icon for a tab. This icon appears next to the heading at the top of most pages. This icon URL corresponds to the 32x32 icon used for the Salesforce Classic 2010 user interface theme.
`icons`	DescribeIcon[]	Array of icon information used for a tab. This field is available in API version 29.0 and later.
`label`	string	The display label for this tab.
`miniIconUrl`	string	The URL for the 16x16 pixel icon that represents a tab. This icon appears in related lists and other locations. This icon URL corresponds to the 16x16 icon used for the current Salesforce theme, introduced in Spring '10.
`name`	string	The API name of the tab.
`sobjectName`	string	The name of the sObject that is primarily displayed on this tab (for tabs that display a particular sObject). For a list of objects, see Standard Objects.
`url`	string	A fully qualified URL for viewing this tab.

SEE ALSO:

DescribeColor

DescribeIcon

`describeTheme()`

Returns information about themes available to the current logged-in user.

Syntax

```
DescribeThemeResult = connection.describeTheme(string sObjectType[]);
```

Usage

Use `describeTheme()` to get current theme information for a given array of objects. Theme information consists of colors and icons for an object in Salesforce, used for a particular theme. For example, the Merchandise__c object might use the "computer32" icon and a primary tab color of red for the regular Salesforce application theme, and a different set of colors and icons for the mobile touchscreen version of Salesforce.

If you pass `null` instead of an array of objects, `describeTheme()` returns theme information for all objects in your organization that use theme colors and icons.

Your client application must be logged in with sufficient access rights to retrieve theme information about your organization's data. For more information, see Factors that Affect Data Access.

`describeTheme()` is available in API version 29.0 and later.

Sample

This Java sample calls `describeTheme()` to retrieve theme information for Account and Contact, and then iterates over the retrieved theme information.

```
public static void describeThemeExample() {
    try {
        // Get current themes
        DescribeTheme themeResult = connection.describeTheme(
                                        new String[] { "Account", "Contact" });
        DescribeThemeItem[] themeItems = themeResult.getThemeItems();
        for (int i = 0; i < themeItems.length; i++) {
            DescribeThemeItem themeItem = themeItems[i];
            System.out.println("Theme information for object " + themeItem.getName());
            // Get color and icon info for each themeItem
            DescribeColor colors[] = themeItem.getColors();
            System.out.println("    Number of colors: " + colors.length);
            int k;
            for (k = 0; k < colors.length; k++) {
                DescribeColor color = colors[k];
                System.out.println("    For Color #" + k + ":");
                System.out.println("      Web RGB Color: " + color.getColor());
                System.out.println("      Context: " + color.getContext());
                System.out.println("      Theme: " + color.getTheme());
            }
            DescribeIcon icons[] = themeItem.getIcons();
            System.out.println("    Number of icons: " + icons.length);
            for (k = 0; k < icons.length; k++) {
                DescribeIcon icon = icons[k];
                System.out.println("    For Icon #" + k + ":");
                System.out.println("      ContentType: " + icon.getContentType());
                System.out.println("      Height: " + icon.getHeight());
                System.out.println("      Theme: " + icon.getTheme());
                System.out.println("      URL: " + icon.getUrl());
                System.out.println("      Width: " + icon.getWidth());
            }
        }
    } catch (ConnectionException ce) {
        ce.printStackTrace();
```

```
    }
}
```

Response

DescribeThemeResult

Faults

`UnexpectedErrorFault`

SEE ALSO:

- DescribeThemeResult
- DescribeThemeItem
- DescribeColor
- DescribeIcon

DescribeThemeResult

The `describeTheme()` and `describeGlobalTheme()` calls return DescribeThemeResult, which contains an array of DescribeThemeItem values.

Name	Type	Description
`themes`	DescribeThemeItem[]	Array of themes. Theme information is provided for each object in the organization that can use theme icons and colors.

DescribeThemeItem

The `describeTheme()` and `describeGlobalTheme()` calls return DescribeThemeResult, which contains an array of DescribeThemeItem values. Each DescribeThemeItem contains an array of colors and icons used for themes, and the name of the object the theme information applies to.

Name	Type	Description
`colors`	DescribeColor[]	Array of colors.
`icons`	DescribeIcon[]	Array of icons.
`name`	string	Name of the object that the theme colors and icons are associated with.

CHAPTER 13 Utility Calls

This topic describes API calls that your client applications can invoke to obtain the system timestamp, user information, and change user passwords.

Note: For a list of general API calls, see Core Calls. For a list of describe calls, see Describe Calls.

The following table lists the API utility calls described in this topic:

Task / Call	Description
`getServerTimestamp()`	Retrieves the current system timestamp from the API.
`changeOwnPassword()`	Allows users to change their own passwords.
`getUserInfo()`	Retrieves personal information for the user associated with the current session.
`match()`	Evaluates sObjects provided as an input for matches among Leads, using the matching rule specified in the input MatchOptions. This call can be used only with the Standard Matching Rule for Leads on Accounts.
`renderEmailTemplate()`	Replaces merge fields in text bodies of email templates with values from Salesforce records, even for polymorphic fields. The email template bodies and their corresponding `whoId` and `whatId` values are specified in the argument.
`resetPassword()`	Changes a user's password to a system-generated value.
`sendEmail()`	Immediately sends an email message.
`sendEmailMessage()`	Immediately sends up to 10 draft email messages.
`setPassword()`	Sets the specified user's password to the specified value.

Samples

The samples in this section are based on the enterprise WSDL file. They assume that you have already imported the WSDL file and created a connection. To learn how to do so, see the Quick Start tutorial.

changeOwnPassword()

Allows users to change their passwords from old values to new values that they specify.

Syntax

```
ChangeOwnPasswordResult changeOwnPasswordResult = connection.changeOwnPassword(string
oldPassword, string newPassword);
```

Usage

Use `changeOwnPassword()` to allow users to change their passwords to values that they specify. For example, a client application prompts a user to specify a different password, and then invokes `changeOwnPassword()` to change the user's password. Use `setPassword()` if you want to set a different user's password to a value you specify. Use `resetPassword()` if you want to reset a target user's password with a random value generated by the API.

Sample Code—Java

This sample accepts old password and new password parameters, which it uses in the `changeOwnPassword()` call to set the new password of the user.

```java
public void doChangeOwnPassword(String oldPasswd, String newPasswd) {
   try {
      ChangeOwnPasswordResult result = connection.changeOwnPassword(oldPasswd, newPasswd);

      System.out.println("Your password was changed to "
            + newPasswd);
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Sample Code—C#

This sample accepts old password and new password parameters, which it uses in the `changeOwnPassword()` call to set the new password of the user.

```csharp
public void doChangeOwnPassword(String oldPasswd, String newPasswd)
{
   try
   {
      ChangeOwnPasswordResult result = binding.changeOwnPassword(oldPasswd, newPasswd);
      Console.WriteLine("Your password was changed to "
            + newPasswd);
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                        e.Message + "\n" + e.StackTrace);
   }
}
```

Arguments

Name	Type	Description
`oldPassword`	string	The user's previous password that is being replaced.
`newPassword`	string	The user's new password.

Response

ChangeOwnPasswordResult

Fault

`InvalidOldPasswordFault`

`InvalidNewPasswordFault`

`UnexpectedErrorFault`

SEE ALSO:

resetPassword()

Utility Calls

setPassword()

getServerTimestamp()

Retrieves the current system timestamp (Coordinated Universal Time (UTC) time zone) from the API.

Syntax

```
GetServerTimestampResult timestamp = connection.getServerTimestamp();
```

Usage

Use `getServerTimestamp()` to obtain the current system timestamp from the API. You might do this if, for example, you need to use the exact timestamp for timing or data synchronization purposes. When you `create()` or `update()` an object, the API uses the system timestamp to update the `CreatedDate` and `LastModifiedDate` fields, respectively, in the object.

The `getServerTimestamp()` call always returns the timestamp in Coordinated Universal Time (UTC) time zone. However, your local system might automatically display the results in your local time based on your time zone settings.

Note: Development tools differ in the way that they handle time data. Some development tools report the local time, while others report only the Coordinated Universal Time (UTC) time zone. To determine how your development tool handles time values, refer to its documentation.

Sample Code—Java

This sample gets the server time and writes it to the console in the user's local time zone.

```
public void doGetServerTimestamp() {
   try {
      GetServerTimestampResult result = connection.getServerTimestamp();
      Calendar serverTime = result.getTimestamp();
      System.out.println("Server time is: "
            + serverTime.getTime().toString());
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Sample Code—C#

This sample gets the server time and writes it to the console in the user's local time zone.

```
public void doGetServerTimestamp()
{
   try
   {
      GetServerTimestampResult result =
            binding.getServerTimestamp();
      DateTime serverTime = result.timestamp;
      Console.WriteLine("Server time is: " +
            serverTime.ToLocalTime().ToString());
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                        e.Message + "\n" + e.StackTrace);
   }
}
```

Arguments

None.

Response

getServerTimestampResult

Fault

`UnexpectedErrorFault`

SEE ALSO:

Utility Calls

getServerTimestampResult

The `getServerTimestamp()` call returns a `GetServerTimestampResult` object, which has the following properties:

Name	Type	Description
`timestamp`	dateTime	System timestamp of the API when the `getServerTimestamp()` call was executed.

getUserInfo()

Retrieves personal information for the user associated with the current session.

Syntax

```
getUserInfoResult result = connection.getUserInfo();
```

Usage

Use `getUserInfo()` to obtain personal information about the currently logged-in user. This convenience API call retrieves and aggregates common profile information that your client application can use for display purposes, performing currency calculations, and so on.

The `getUserInfo()` call applies only to the username under which your client application has logged in. To retrieve additional personal information not found in the getUserInfoResult object, you can call `retrieve()` on the User object and pass in the `userID` returned by this call. To retrieve personal information about other users, you could call `retrieve()` (if you know their user ID) or `query()` on the User object.

Sample Code—Java

This sample calls `getUserInfo()` and writes information about the current user to the console.

```
public void doGetUserInfo() {
   try {
      GetUserInfoResult result = connection.getUserInfo();
      System.out.println("\nUser Information");
      System.out.println("\tFull name: " + result.getUserFullName());
      System.out.println("\tEmail: " + result.getUserEmail());
      System.out.println("\tLocale: " + result.getUserLocale());
      System.out.println("\tTimezone: " + result.getUserTimeZone());
      System.out.println("\tCurrency symbol: " + result.getCurrencySymbol());
      System.out.println("\tOrganization is multi-currency: " +
            result.isOrganizationMultiCurrency());
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Sample Code—C#

This sample calls `getUserInfo()` and writes information about the current user to the console.

```
public void doGetUserInfo()
{
   try
   {
      GetUserInfoResult result = binding.getUserInfo();
      Console.WriteLine("\nUser Information");
      Console.WriteLine("\tFull name: " + result.userFullName);
      Console.WriteLine("\tEmail: " + result.userEmail);
      Console.WriteLine("\tLocale: " + result.userLocale);
      Console.WriteLine("\tTimezone: " + result.userTimeZone);
      Console.WriteLine("\tCurrency symbol: " + result.currencySymbol);
      Console.WriteLine("\tOrganization is multi-currency: " +
            result.organizationMultiCurrency);
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                        e.Message + "\n" + e.StackTrace);
   }
}
```

Arguments

None.

Response

getUserInfoResult

Fault

`UnexpectedErrorFault`

SEE ALSO:

Utility Calls

getUserInfoResult

The `getUserInfo()` call returns a `GetUserInfoResult` object.

Name	Type	Description
`accessibilityMode`	boolean	Available in API version 7.0 and later. Indicates whether user interface modifications for the visually impaired are on (`true`) or off (`false`). The modifications facilitate the use of screen readers such as JAWS.

Name	Type	Description
`chatterExternal`	boolean	Type of user license assigned to the Profile associated with the user. Indicates whether a user is part of the org or external. Available in API 40.0 and later.
`currencySymbol`	string	Currency symbol to use for displaying currency values. Applicable only when `organizationMultiCurrency` is `false`.
`organizationId`	ID	ID of the organization. Allows third-party tools to uniquely identify individual organizations in Salesforce, which is useful for retrieving billing or organization-wide setup information.
`organizationMultiCurrency`	boolean	Indicates whether the user's organization uses multiple currencies (`true`) or not (`false`).
`organizationName`	string	Name of the user's organization or company.
`orgDefaultCurrencyIsoCode`	string	Default currency ISO code. Applicable only when `organizationMultiCurrency` is `false`. When the logged-in user creates any objects that have a currency ISO code, the API uses this currency ISO code if it is not explicitly specified in the create() call.
`profileID`	ID	ID of the profile associated with the role currently assigned to the user.
`roleID`	ID	Role ID of the role currently assigned to the user.
`sessionSecondsValid`	int	The number of seconds before the session expires, starting from the last update time. Available in API version 21.0 and later.
`userDefaultCurrencyIsoCode`	string	Default currency ISO code. Applicable only when `organizationMultiCurrency` is `true`. When the logged-in user creates any objects that have a currency ISO code, the API uses this currency ISO code if it is not explicitly specified in the create() call.
`userEmail`	string	User's email address.
`userFullName`	string	User's full name.
`userID`	ID	User ID.
`userLanguage`	string	User's language, which controls the language for labels displayed in an application. String is 2-5 characters long. The first two characters are always an ISO language code, for example "fr" or "en." If the value is further qualified by country, then the string also has an underscore (_) and another ISO country code, for example "US" or "UK. For example, the string for the United States is "en_US", and the string for French Canadian is "fr_CA." For a list of the languages that Salesforce supports, see the Salesforce online help topic "What languages does Salesforce support?"
`userLocale`	string	User's locale, which controls the formatting of dates and choice of symbols for currency. The first two characters are always an ISO language code, for example "fr" or "en." If the value is further qualified by country, then the string also has

Name	Type	Description
		an underscore (_) and another ISO country code, for example "US" or "UK. For example, the string for the United States is "en_US", and the string for French Canadian is "fr_CA."
`userName`	string	User's login name.
`userTimeZone`	string	User's time zone.
`userType`	string	Type of user license assigned to the Profile associated with the user.
`userUiSkin`	string	Available in API version 7.0 and later. Possible values are: • `theme3`—If the user is using the Salesforce Classic 2010 user interface theme, also known as the *Aloha* interface • `theme2`—If the user is using the Salesforce Classic 2005 user interface theme • `theme1`—If the user is using the oldest user interface theme (obsolete) In the online app, this look and feel setting is configurable from Setup by entering *`User Interface`* in the `Quick Find` box, then selecting **User Interface**. See User Interface Themes.

match()

Evaluates sObjects provided as an input for matches among Leads, using the matching rule specified in the input MatchOptions. This call can be used only with the Standard Matching Rule for Leads on Accounts.

This operation is available in API versions 42.0 and later, in **Professional**, **Enterprise**, **Performance**, and **Unlimited** Editions with **Pardot Pro** or **Pardot Ultimate** Edition.

Syntax

```
MatchResult[] callResults = connection.match(SObject[] inputSObjectArray, MatchOptions
   matchOptions);
```

Arguments

Name	Type	Description
inputSObjectArray	Array of sObject	A list of sObjects to evaluate for matches.
matchOptions	MatchOptions	Options, such as the match rule, used during the match operation.

Response

MatchResult

MatchOptions

Represents a type to be used with a match operation. It describes options to be used during the match operation. This type can be used only with the Standard Matching Rule for Leads on Accounts.

This type is available in API versions 42.0 and later, in **Professional**, **Enterprise**, **Performance**, and **Unlimited** Editions with **Pardot Pro** or **Pardot Ultimate** Edition.

Fields

Field	Details	[illegible]
`Fields`	string	[illegible]
`MatchEngine`	string	[illegible]
`Rule`	string	[illegible]

Field	Details	[illegible]
		[illegible]
`SobjectType`	string	[illegible]

`renderEmailTemplate()`

Replaces merge fields in text bodies of email templates with values from Salesforce records, even for polymorphic fields. The email template bodies and their corresponding `whoId` and `whatId` values are specified in the argument.

Syntax

```
RenderEmailTemplateResult = connection.renderEmailTemplate(RenderEmailTemplateRequest[]
renderRequests);
```

Usage

The `renderEmailTemplate()` call is equivalent to rendering merge fields when sending an email with a custom template through the sendEmail() call.

The `renderEmailTemplate()` call can take up to 10 RenderEmailTemplateRequest elements in its array argument, and each RenderEmailTemplateRequest can contain up to 10 template bodies. Each request is independent from the other requests in the array—an error in one request doesn't affect the other requests. Similarly, an error in one template body doesn't cause an error in other text bodies within the same request.

The `renderEmailTemplate()` call substitutes a merge field with the value of either the `whatId` or `whoId` in RenderEmailTemplateRequest:

- If the merge field references a non-human object, it's replaced with the corresponding value of `whatId`. For example, if a merge field references an account or opportunity, the `whatId` value is substituted.
- If the merge field references a human object, it's replaced with the corresponding value of `whoId`. For example, if a merge field references a contact, lead, or user, the `whoId` value is substituted.

The `whatId` and `whoId` field values of RenderEmailTemplateRequest are validated for each request. If the `whatId` doesn't reference a valid what ID (a non-human object), or the `whoId` doesn't reference a valid who ID (a human object), an error is set for the request.

Sample Code—Java

In this sample, the `renderEmailTemplate()` call substitutes all contact merge fields with the value from the specified *`whoId`* argument. Similarly, the call substitutes the opportunity merge field (`{!Opportunity.Name}`) with the specified *`whatId`* value. The second template body in this sample has an incorrect merge field (`{!Contact.SNARF}`), which causes an error on the second template. However, the entire template rendering request is successful.

```
public void renderTemplates(String whoId, String whatId)
        throws ConnectionException, RemoteException, MalformedURLException {
    // Array of three template bodies.
    // The second template body generates an error.
    final String[] TEMPLATE_BODIES = new String[] {
           "This is a good template body {!Contact.Name}",
           "This is a bad template body {!Opportunity.Name} {!Contact.SNARF} ",
           "This is another good template body {!Contact.Name}"};

    // Create request and add template bodies, whatId, and whoId.
    RenderEmailTemplateRequest req = new RenderEmailTemplateRequest();
    req.setTemplateBodies(TEMPLATE_BODIES);
    req.setWhatId(whatId);
    req.setWhoId(whoId);
    // An array of results is returned, one for each request.
    // We only have one request.
    RenderEmailTemplateResult[] results =  connection.renderEmailTemplate(
            new RenderEmailTemplateRequest[] { req });
    if (results != null) {
        // Check results for our one and only request.
        // Check request was processed successfully, and if not, print the errors.
        if (!results[0].isSuccess()) {
            System.out.println(
            "The following errors were encountered while rendering email templates:");
            for (Error err : results[0].getErrors()) {
                System.out.println(err.getMessage());
            }
        } else {
            // Check results for each body template and print merged body
            RenderEmailTemplateBodyResult[] bodyResults = results[0].getBodyResults();
            for( Integer i=0;i<bodyResults.length;i++) {
                RenderEmailTemplateBodyResult result = bodyResults[i];
                if (result.isSuccess()) {
                    System.out.println("\nMerged body: \n" + result.getMergedBody());
                } else {
                    System.out.println("\nErrors were found for body[" + i + "]: ");
                    for (RenderEmailTemplateError err : result.getErrors()) {
                        System.out.println(err.getMessage() + " - Field name: "
                            + err.getFieldName());
                    }
                }
            }
        }
    }
}
```

Let's say you run this sample by specifying a valid contact ID for the first argument (*whoId*) and null for the second argument (*whatId*). The second template has one error set, for the incorrect merge field. The response looks like the following.

```
Merged body:
This is a good template body Howard Jones

Errors were found for body[1]:
Field Contact.SNARF does not exist. Check spelling. - Field name: Contact.SNARF


Merged body:
This is another good template body Howard Jones
```

RenderEmailTemplateRequest

Name	Type	Description
templateBodies	string[]	An array of text bodies that can contain merge fields, such as {!Account.Phone} or {!Contact.Name}.
whatId	reference	References a non-human object, such as an account, an opportunity, a campaign, a case, or a custom object. The whatId is polymorphic, which means that it's an ID that can refer to more than one type of object, such as a case or an opportunity.
whoId	reference	References a human object, such as a lead, contact, or user. The whoId is polymorphic, which means that it's an ID that can refer to more than one type of object.

Fault

The renderEmailTemplate() can return any of these API status codes.

EMAIL_TEMPLATE_FORMULA_ERROR

EMAIL_TEMPLATE_MERGEFIELD_ACCESS_ERROR

EMAIL_TEMPLATE_MERGEFIELD_ERROR

EMAIL_TEMPLATE_MERGEFIELD_VALUE_ERROR

EMAIL_TEMPLATE_PROCESSING_ERROR

RenderEmailTemplateResult

Contains status and error information for a request processed by the renderEmailTemplate() call, including individual results of rendered email templates.

Name	Type	Description
bodyResults	RenderEmailTemplateBodyResult[]	Contains status and error information for each template body that renderEmailTemplate() processed in a request, including merged body text of templates.

Name	Type	Description
errors	Error[]	Contains one or more errors that occurred when renderEmailTemplate() rendered a request.
success	boolean	Indicates whether a request was successfully processed (true) or not (false).

RenderEmailTemplateBodyResult

Contains status and error information for each template body that renderEmailTemplate() processed in a request, including merged body text of templates.

Name	Type	Description
errors	RenderEmailTemplateError[]	Contains one or more errors that are associated with a template body that renderEmailTemplate() processed.
mergedBody	string	The text of the template body with the merge fields replaced with their corresponding values from Salesforce objects. The whatId and whoId fields on the request reference the Salesforce objects to use. The mergedBody field is populated only when the rendering of the template was successful (success is equal to true). If success is equal to false, mergedBody is null.
success	boolean	Indicates whether a template body was successfully rendered (true) or not (false).

RenderEmailTemplateError

An error that occurred when renderEmailTemplate() processed a template body.

Name	Type	Description
fieldName	string[]	The merge field that affected the error condition.
message	string	Error message text.
offset	int	The offset in the template body text of the merge field that caused the error. The offset is calculated as the number of characters from the start of the body text. The offset is -1 if it can't be determined because of insufficient contextual information.
statusCode	StatusCode	A code that characterizes the error. The full list of status codes is available in the WSDL file for your organization (see Generating the WSDL File for Your Organization).

resetPassword()

Changes a user's password to a temporary, system-generated value.

Syntax

```
string password = connection.resetPassword(ID userID);
```

Usage

Use `resetPassword()` to request that the API change the password of a User or SelfServiceUser, and return a system-generated password string of random letters and numbers. Use `setPassword()` instead if you want to set the password to a specific value.

Your client application must be logged in with sufficient access rights to change the password for the specified user. For more information, see Factors that Affect Data Access.

For information on IDs, see ID Field Type.

Sample Code—Java

This sample resets the password for the user specified by the `userId` parameter. It calls `resetPassword()` with this ID and gets the temporary password from the call result. It writes this temporary password to the console and returns it.

```
public String doResetPassword(String userId) {
   String result = "";
   try {
      ResetPasswordResult rpr = connection.resetPassword(userId);
      result = rpr.getPassword();
      System.out.println("The temporary password for user ID " + userId
            + " is " + result);
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
   return result;
}
```

Sample Code—C#

This sample resets the password for the user specified by the `userId` parameter. It calls `resetPassword()` with this ID and gets the temporary password from the call result. It writes this temporary password to the console and returns it.

```
public String doResetPassword(String userId)
{
   String result = "";
   try
   {
      ResetPasswordResult rpr = binding.resetPassword(userId);
      result = rpr.password;
      Console.WriteLine("The temporary password for user ID " + userId + " is " +
            result);
   }
```

```
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                        e.Message + "\n" + e.StackTrace);
   }
   return result;
}
```

Arguments

Name	Type	Description
userID	ID	ID of the User or SelfServiceUser whose password you want to reset. For information on IDs, see ID Field Type.

Response

Name	Type	Description
password	string	New password generated by the API. Once the user logs in with this password, they will be asked to provide a new password. This password is temporary, meaning that it cannot be reused once the user has set his or her new password.

Fault

InvalidIdFault

UnexpectedErrorFault

SEE ALSO:

Utility Calls

sendEmail()

Immediately sends an email message.

Syntax

For single email messages:

```
SendEmailResult = connection.sendEmail(SingleEmailMessage emails[]);
```

For mass email messages:

```
SendEmailResult = connection.sendEmail(MassEmailMessage emails[]);
```

Usage

Use this call with Lightning Platform AppExchange applications, custom applications, or other applications outside of Salesforce to send individual and mass email. The email can include all standard email attributes (such as subject line and blind carbon copy address), use Salesforce email templates, and be in plain text or HTML format. You can use Salesforce to track the status of HTML email, including the date the email was sent, first opened, last opened, and the total number of times it was opened. (See "Tracking HTML Email" in the Salesforce Help for more information.)

The email address of the logged-in user is inserted in the `From Address` field of the email header. All return email and out-of-office replies go to the logged-in user. If bounce management is enabled and `SingleEmailMessage.targetObjectId` or `MassEmailMessage.targetObjectIds` is set, bounces are processed by Salesforce automatically, and the appropriate records are updated; otherwise, they go to the logged-in user. Bounce management works for contacts and leads only.

Note:

- Single email messages sent with this call count against the sending organization's daily single email limit. When this limit is reached, `sendEmail()` calls using SingleEmailMessage are rejected, and the user receives a `SINGLE_EMAIL_LIMIT_EXCEEDED` error code. However, single emails sent through the application are allowed.
- Mass email messages sent with this call count against the sending organization's daily mass email limit. When this limit is reached, `sendEmail()` calls using MassEmailMessage are rejected, and the user receives a `MASS_MAIL_LIMIT_EXCEEDED` error code.
- Starting in API version 35.0, you can enforce or ignore the **Email Opt Out** setting for contacts or leads with the `optOutPolicy` field of `SingleEmailMessage`. The `optOutPolicy` field applies to recipients in the To, CC, and BCC lists of the email. By default and in earlier versions, `SingleEmailMessage` ignores the **Email Opt Out** setting of recipients and the email is sent to all recipients. When using `MassEmailMessage`, the **Email Opt Out** setting of the recipients is always enforced—emails aren't sent to recipients that have opted out and are sent to all other recipients.

SingleEmailMessage has an optional field called `OrgWideEmailAddressId`. This is an object ID to an OrgWideEmailAddress object. If `OrgWideEmailAddressId` is set, the OrgWideEmailAddress.`DisplayName` field is used in the email header, instead of the logged-in user's `Display Name`. The sending email address in the header is also set to the field defined in OrgWideEmailAddress.`Address`.

Note: If both the `DisplayName` in an OrgWideEmailAddress and `senderDisplayName` are defined, the user receives a `DUPLICATE_SENDER_DISPLAY_NAME` error.

Sample Code—Java

This sample creates an email message and sets its fields, including the To, CC and BCC recipients, subject, and body text. It also sets a recipient to the ID of the logged-in user using the `setTargetObjectId` method, which causes the email to be sent to the email address of the specified user. The sample creates an attachment and sends the email message with the attachment. Finally, it writes a status message or an error message, if any, to the console.

```
public void doSendEmail() {
   try {
      EmailFileAttachment efa = new EmailFileAttachment();
      byte[] fileBody = new byte[1000000];
      efa.setBody(fileBody);
      efa.setFileName("attachment");
      SingleEmailMessage message = new SingleEmailMessage();
      message.setBccAddresses(new String[] {
         "someone@salesforce.com"
      });
```

```
        message.setCcAddresses(new String[] {
            "person1@salesforce.com", "person2@salesforce.com", "003xx00000a1b2cAAC"
        });
        message.setBccSender(true);
        message.setEmailPriority(EmailPriority.High);
        message.setReplyTo("person1@salesforce.com");
        message.setSaveAsActivity(false);
        message.setSubject("This is how you use the " + "sendEmail method.");
        // We can also just use an id for an implicit to address
        GetUserInfoResult guir = connection.getUserInfo();
        message.setTargetObjectId(guir.getUserId());
        message.setUseSignature(true);
        message.setPlainTextBody("This is the humongous body "
                + "of the message.");
        EmailFileAttachment[] efas = { efa };
        message.setFileAttachments(efas);
        message.setToAddresses(new String[] { "person3@salesforce.com" });
        SingleEmailMessage[] messages = { message };
        SendEmailResult[] results = connection.sendEmail(messages);
        if (results[0].isSuccess()) {
            System.out.println("The email was sent successfully.");
        } else {
            System.out.println("The email failed to send: "
                    + results[0].getErrors()[0].getMessage());
        }
    } catch (ConnectionException ce) {
        ce.printStackTrace();
    }
}
```

This example shows how to send an email with the opt-out setting enforced. Recipients are specified by their IDs. The `SendEmailOptOutPolicy.FILTER` option causes the email to be sent only to recipients that haven't opted out from email.

```
SingleEmailMessage message = new SingleEmailMessage();
// Set recipients to two contact IDs.
// Replace IDs with valid record IDs in your org.
message.setToAddresses(new String[] { "003D000000QDexS", "003D000000QDfW5" });
message.setOptOutPolicy(SendEmailOptOutPolicy.FILTER);
message.setSubject("Opt Out Test Message");
message.setPlainTextBody("This is the message body.");
SingleEmailMessage[] messages = { message };
SendEmailResult[] results = connection.sendEmail(messages);
if (results[0].isSuccess()) {
    System.out.println("The email was sent successfully.");
} else {
    System.out.println("The email failed to send: "
          + results[0].getErrors()[0].getMessage());
}
```

Sample Code—C#

This sample creates an email message and sets its fields, including the To, CC and BCC recipients, subject, and body text. It also sets a recipient to the ID of the logged-in user using the `setTargetObjectId` method, which causes the email to be sent to the email address of the specified user. The sample creates an attachment and sends the email message with the attachment. Finally, it writes a status message or an error message, if any, to the console.

```
public void doSendEmail()
{
   try
   {
      EmailFileAttachment efa = new EmailFileAttachment();
      byte[] fileBody = new byte[1000000];
      efa.body = fileBody;
      efa.fileName = "attachment";
      SingleEmailMessage message = new SingleEmailMessage();
      message.setBccAddresses(new String[] {
         "someone@salesforce.com"
      });
      message.setCcAddresses(new String[] {
         "person1@salesforce.com", "person2@salesforce.com", "003xx00000a1b2cAAC"
      });
      message.bccSender = true;
      message.emailPriority = EmailPriority.High;
      message.replyTo = "person1@salesforce.com";
      message.saveAsActivity = false;
      message.subject = "This is how you use the " + "sendEmail method.";
      // We can also just use an id for an implicit to address
      GetUserInfoResult guir = binding.getUserInfo();
      message.targetObjectId = guir.userId;
      message.useSignature = true;
      message.plainTextBody = "This is the humongous body "
            + "of the message.";
      EmailFileAttachment[] efas = { efa };
      message.fileAttachments = efas;
      message.toAddresses = new String[] { "person3@salesforce.com" };
      SingleEmailMessage[] messages = { message };
      SendEmailResult[] results = binding.sendEmail(messages);
      if (results[0].success)
      {
         Console.WriteLine("The email was sent successfully.");
      }
      else
      {
         Console.WriteLine("The email failed to send: "
               + results[0].errors[0].message);
      }
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                        e.Message + "\n" + e.StackTrace);
   }
}
```

This example shows how to send an email with the opt-out setting enforced. Recipients are specified by their IDs. The `SendEmailOptOutPolicy.FILTER` option causes the email to be sent only to recipients that haven't opted out from email.

```
SingleEmailMessage message = new SingleEmailMessage();
// Set recipients to two contact IDs.
// Replace IDs with valid record IDs in your org.
message.toAddresses = new String[] { "003D000000QDexS", "003D000000QDfW5" };
message.optOutPolicy = SendEmailOptOutPolicy.FILTER;
message.subject = "Opt Out Test Message";
message.plainTextBody = "This is the message body.";
SingleEmailMessage[] messages = { message };
SendEmailResult[] results = binding.sendEmail(messages);
if (results[0].success)
{
    Console.WriteLine("The email was sent successfully.");
} else {
    Console.WriteLine("The email failed to send: "
          + results[0].errors[0].message);
}
```

BaseEmail

The following table contains the arguments used in both single and mass email.

Note: If templates are not being used, all email content must be in plain text, HTML, or both.

Name	Type	Description
bccSender	boolean	Indicates whether the email sender receives a copy of the email that is sent. For a mass mail, the sender is only copied on the first email sent. Note: If the BCC compliance option is set at the organization level, the user cannot add BCC addresses on standard messages. The following error code is returned: `BCC_NOT_ALLOWED_IF_BCC_ COMPLIANCE_ ENABLED`. Contact your Salesforce representative for information on BCC compliance.
saveAsActivity	boolean	Optional. The default value is `true`, meaning the email is saved as an activity. This argument only applies if the recipient list is based on `targetObjectId` or `targetObjectIds`. If HTML email tracking is enabled for the organization, you can track open rates.
useSignature	boolean	Indicates whether the email includes an email signature if the user has one configured. The default is `true`, meaning if the user has a signature it is included in the email unless you specify `false`.
emailPriority	picklist	Optional. The priority of the email. • Highest • High • Normal • Low

Name	Type	Description
		• Lowest The default is Normal.
`replyTo`	string	Optional. The email address that receives the message when a recipient replies. This cannot be set if you are using a Visualforce email template that specifies a `replyTo` value.
`subject`	string	Optional. The email subject line. If you are using an email template and attempt to override the subject line, an error message is returned.
`templateId`	ID	The ID of the template to be merged to create this email.
`senderDisplayName`	string	Optional. The name that appears on the `From` line of the email. This cannot be set if the object associated with a `OrgWideEmailAddressId` for a SingleEmailMessage has defined its `DisplayName` field.

SingleEmailMessage

The following table contains the arguments single email uses in addition to the base email arguments.

Name	Type	Description
`bccAddresses`	string[]	Optional. An array of blind carbon copy (BCC) addresses or object IDs of the contacts, leads, and users you're sending the email to. This argument is allowed only when a template is not used. The maximum size for this field is 4,000 bytes. The maximum total of `toAddresses`, `ccAddresses`, and `bccAddresses` per email is 150. All recipients in these three fields count against the limit for email sent using Apex or the API. You can specify opt-out email options with the `optOutPolicy` field only for those recipients who were added by their IDs. Email addresses are verified to ensure that they have the correct format and haven't been marked as bounced. If the BCC COMPLIANCE option is set at the organization level, the user cannot add BCC addresses on standard messages. The following error code is returned: `BCC_NOT_ALLOWED_IF_BCC_COMPLIANCE_ENABLED`. All emails must have a recipient value in at least one of the following fields: • `toAddresses` • `ccAddresses` • `bccAddresses` • `targetObjectId`
`ccAddresses`	string[]	Optional. An array of carbon copy (CC) addresses or object IDs of the contacts, leads, and users you're sending the email to. This

Name	Type	Description
		argument is allowed only when a template is not used. The maximum size for this field is 4,000 bytes. The maximum total of `toAddresses`, `ccAddresses`, and `bccAddresses` per email is 150. All recipients in these three fields count against the limit for email sent using Apex or the API. You can specify opt-out email options with the `optOutPolicy` field only for those recipients who were added by their IDs. Email addresses are verified to ensure that they have the correct format and haven't been marked as bounced. All emails must have a recipient value in at least one of the following fields: • `toAddresses` • `ccAddresses` • `bccAddresses` • `targetObjectId`
`charset`	string	Optional. The character set for the email. If this value is null, the user's default value is used. Unavailable if specifying `templateId` because the template specifies the character set.
`documentAttachments`	ID[]	**Deprecated. Use `entityAttachments` instead.** Optional. An array listing the ID of each Document you want to attach to the email.
`entityAttachments`	ID[]	Optional. Array of IDs of Document, ContentVersion, or Attachment items to attach to the email. This field is available in API version 35.0 and later.
`fileAttachments`	EmailFileAttachment[]	Optional. An array listing the file names of the binary and text files you want to attach to the email. You can attach multiple files as long as the total size of all attachments does not exceed 10 MB.
`htmlBody`	string	Optional. The HTML version of the email, specified by the sender. The value is encoded according to the specification associated with the organization.
`inReplyTo`	string	Optional. The In-Reply-To field of the outgoing email. Identifies the emails to which this one is a reply (parent emails). Contains the parent emails' Message-IDs. See `RFC2822 - Internet Message Format`.
`optOutPolicy`	SendEmailOptOutPolicy (enumeration of type string)	Optional. If you add contact, lead, or person account recipients by ID instead of email address, this field determines the behavior of the `sendEmail()` call. By default, the opt-out settings for recipients added by their email addresses aren't checked and those recipients always receive the email. Possible values of the `SendEmailOptOutPolicy` enumeration are:

Name	Type	Description
		• SEND (default)—The email is sent to all recipients. The recipients' Email Opt Out setting is ignored. The setting Enforce email privacy settings is ignored. • FILTER—No email is sent to recipients that have the Email Opt Out option set. Emails are sent to the other recipients. The setting Enforce email privacy settings is ignored. • REJECT—If any of the recipients have the Email Opt Out option set, sendEmail() throws an error and no email is sent. The setting Enforce email privacy settings is respected, as are the selections in the data privacy record based on the Individual object. If any of the recipients have Don't Market, Don't Process, or Forget this Individual selected, sendEmail() throws an error and no email is sent. Note: The Send Non-Commercial Email permission is not respected. This field is available in API version 35.0 and later.
orgWideEmailAddressId	ID	Optional. The object ID of the OrgWideEmailAddress associated with the outgoing email. OrgWideEmailAddress.DisplayName cannot be set if the senderDisplayName field is already set.
plainTextBody	string	Optional. The text version of the email, specified by the sender.
references	string	Optional. The References field of the outgoing email. Identifies an email thread. Contains the parent emails' Message-ID and References fields and possibly In-Reply-To fields. See RFC2822 - Internet Message Format.
targetObjectId	ID	Optional. The object ID of the contact, lead, or user the email will be sent to. The object ID you enter sets the context and ensures that merge fields in the template contain the correct data All emails must have a recipient value in at least one of the following fields: • toAddresses • ccAddresses • bccAddresses • targetObjectId
toAddresses	string[]	Optional. An array of email addresses or object IDs of the contacts, leads, or users you're sending the email to. This argument is allowed only when a template is not used. The maximum size for this field is 4,000 bytes. The maximum total of toAddresses, ccAddresses, and bccAddresses per email is 150. All

Name	Type	Description
		recipients in these three fields count against the limit for email sent using Apex or the API. You can specify opt-out email options with the `optOutPolicy` field only for those recipients who were added by their IDs. Email addresses are verified to ensure that they have the correct format and haven't been marked as bounced. All emails must have a recipient value in at least one of the following fields: • `toAddresses` • `ccAddresses` • `bccAddresses` • `targetObjectId`
`treatBodiesAsTemplate`	boolean	Optional. If set to `true`, the subject, plain text, and HTML text bodies of the email are treated as template data. The merge fields are resolved using the `renderEmailTemplate()` call. Default is `false`. This field is available in API version 35.0 and later.
`treatTargetObjectAsRecipient`	boolean	Optional. If set to `true`, the `targetObjectId` (a contact, lead, or user) is the recipient of the email. If set to `false`, the `targetObjectId` is supplied as the `WhoId` field for template rendering but isn't a recipient of the email. The default is `true`. This field is available in API version 35.0 and later. In prior versions, the `targetObjectId` is always a recipient of the email.
`whatId`	ID	Optional. If you specify a contact for the `targetObjectId` field, you can specify a `whatId` as well. This field helps to further ensure that merge fields in the template contain the correct data. The value must be one of the following types: • `Account` • `Asset` • `Campaign` • `Case` • `Contract` • `Opportunity` • `Order` • `Product` • `Solution` • `Custom`

MassEmailMessage

The following table contains the arguments mass email uses in addition to the base email arguments.

Name	Type	Description
`description`	string	A value used internally to identify the object in the mass email queue.
`targetObjectIds`	ID[]	An array of object IDs of the contacts, leads, or users the email will be sent to. The object IDs you enter set the context and ensure that merge fields in the template contain the correct data. The objects must be of the same type (either all contacts, all leads, or all users). You can list up to 250 IDs per email. If you specify a value for the `targetObjectIds` field, optionally specify a `whatId` as well to set the email context to a user, contact, or lead. This ensures that merge fields in the template contain the correct data.
`whatIds`	ID[]	Optional. If you specify an array of contacts for the `targetObjectIds` field, you can specify an array of `whatIds` as well. This helps to further ensure that merge fields in the template contain the correct data. The values must be one of the following types: • Contract • Case • Opportunity • Product If you specify `whatIds`, specify one for each `targetObjectId`; otherwise, you receive an `INVALID_ID_FIELD` error.

EmailFileAttachment

The following table contains properties that the EmailFileAttachment uses in the SingleEmailMessage object to specify attachments passed in as part of the request, as opposed to a Document passed in using the `documentAttachments` argument.

Property	Type	Description
`body`	base64	The attachment itself.
`contentType`	string	Optional. The attachment's Content-Type.
`fileName`	string	The name of the file to attach.
`inline`	boolean	Optional. Specifies a Content-Disposition of inline (`true`) or attachment (`false`). In most cases, inline content is displayed to the user when the message is opened. Attachment content requires user action to be displayed.

Response

SendEmailResult

Fault

The following API status codes can be returned. Also, `sendEmail()` can return other errors when rendering email templates. See `renderEmailTemplate()` Faults.

BCC_NOT_ALLOWED_IF_BCC_COMPLIANCE_ENABLED

BCC_SELF_NOT_ALLOWED_IF_BCC_COMPLIANCE_ENABLED

DUPLICATE_SENDER_DISPLAY_NAME

EMAIL_ADDRESS_BOUNCED

EMAIL_NOT_PROCESSED_DUE_TO_PRIOR_ERROR

EMAIL_OPTED_OUT

ERROR_IN_MAILER

INSUFFICIENT_ACCESS_ON_CROSS_REFERENCE_ENTITY

INVALID_CONTENT_TYPE

INVALID_EMAIL_ADDRESS

INVALID_ID_FIELD

INVALID_MESSAGE_ID_REFERENCE

INVALID_SAVE_AS_ACTIVITY_FLAG

LIMIT_EXCEEDED

MALFORMED_ID

MASS_MAIL_LIMIT_EXCEEDED

NO_MASS_MAIL_PERMISSION

REQUIRED_FIELD_MISSING

SINGLE_EMAIL_LIMIT_EXCEEDED

TEMPLATE_NOT_ACTIVE

UNVERIFIED_SENDER_ADDRESS

SendEmailResult

The `sendEmail()` call returns a list of SendEmailResult objects. Each SendEmailResult object has the following properties:

Name	Type	Description
`success`	boolean	If sending single email: Indicates whether the email was successfully accepted for delivery by the message transfer agent (`true`) or not (`false`). Even if `success` = `true`, it does not mean the intended recipients received the email, as it could have bounced or been blocked by a spam blocker. Also, even if the email is successfully accepted for delivery by the message transfer agent, there can still be errors in the error array related to individual addresses within the email. If sending mass email: Indicates whether the email was successfully added to the queue for processing (`true`) or not (`false`). Even if the email was added to the

Name	Type	Description
		queue, there can still be processing errors that prevent delivery to the intended recipients.
SendEmailError	Error[]	If an error occurred during the sendEmail() call, a list of SendEmailError objects is returned. For single email, errors indicate that Salesforce wasn't able to deliver the email. For mass email, errors indicate that the email wasn't added to the queue for processing.

SendEmailError

SendEmailError can have the following attributes:

Name	Type	Description
Fields	Field[]	Reserved for future use. Array of one or more field names. Identifies which fields in the object, if any, affected the error condition.
Message	string	Error message text.
StatusCode	statusCode	A code that characterizes the error. The full list of status codes is available in the WSDL file for your organization.
TargetObjectId	ID	The object ID of the target for which the error occurred.

Note: If an error occurs that prevents sendEmail() from sending the email to one or more targets, each TargetObjectId for those targets has an associated error in SendEmailResult. A TargetObjectId that does not have an associated error in SendEmailResult indicates the email was sent to the target. If SendEmailResult has an error that does not have an associated TargetObjectId, no email was sent.

The following is an example of how to parse through a resulting set for errors:

```
Messaging.SingleEmailMessage email = new Messaging.SingleEmailMessage();
email.setToAddresses(new String[] { 'admin@acme.com' });
email.setSubject('my subject');
email.setPlainTextBody('plain text body');
List<Messaging.SendEmailResult> results =
    Messaging.sendEmail(new Messaging.Email[] { email });
if (!results.get(0).isSuccess()) {
    System.StatusCode statusCode = results.get(0).getErrors()[0].getStatusCode();
    String errorMessage = results.get(0).getErrors()[0].getMessage();
}
```

sendEmailMessage()

Immediately sends up to 10 draft email messages.

Syntax

For Enterprise SOAP:

```
SendEmailResult[] = connection.sendEmailMessage( String[] draftEmailIds);
```

For Partner SOAP:

```
SendEmailResult[] = connection.sendEmailMessage( ID[] draftEmailIds);
```

Usage

Use this call with Lightning Platform AppExchange applications, custom applications, or other applications outside of Salesforce to send up to 10 draft email messages. The messages can include all standard email attributes (such as subject line and blind carbon copy address), use Salesforce email templates, and be in plain text or HTML format. You can use Salesforce to track the status of HTML email, including the date the email was sent, first opened, last opened, and the total number of times it was opened. (See "Tracking HTML Email" in the Salesforce online help for more information.)

The email address of the logged-in user is inserted in the `From Address` field of the email header. All return email and out-of-office replies go to the logged-in user. If bounce management is enabled and `SingleEmailMessage.targetObjectId` or `MassEmailMessage.targetObjectIds` is set, bounces are processed by Salesforce automatically, and the appropriate records are updated; otherwise, they go to the logged-in user. Bounce management works for contacts and leads only.

Note:

- Email messages sent with this call count against the sending organization's daily single email limit. When this limit is reached, `sendEmailMessage()` calls using SingleEmailMessage are rejected, and the user receives a `SINGLE_EMAIL_LIMIT_EXCEEDED` error code. However, single emails sent through the application are allowed.
- Mass email messages sent with this call count against the sending organization's daily mass email limit. When this limit is reached, `sendEmail()` calls using MassEmailMessage are rejected, and the user receives a `MASS_MAIL_LIMIT_EXCEEDED` error code.
- The `AllOrNone` header is not honored by this call. `sendEmailMessage()` returns partial success even if the `AllOrNone` header is set to `true`.

Sample Code—Java

This sample creates a case and a draft email message, and sets the message fields, including the `From`, `To`, `CC`, and `BCC` recipients, subject, and body text. It also creates an attachment and sends the email message with the attachment. Finally, it writes a status message or an error message, if any, to the console.

```
public void doSendEmail() {
   try {
      //Create a case
      Case theCase = new Case();
      theCase.setSubject("Sample Case");
      SaveResult[] saveResult = connection.create(new SObject[] { theCase });
      String caseId = saveResult[0].getId();

      //Create a draft EmailMessage
      EmailMessage message = new EmailMessage();
      message.setParentId(theCase.getId());
      message.setBccAddress("bcc@email.com");
```

```
    message.setCcAddress("cc1@salesforce.com; cc2@email.com");
    message.setSubject("This is how you use the sendEmailMessage method.");
    message.setFromAddress("from@email.com");
    message.setFromName("Sample Code");
    message.setTextBody("This is the text body of the message.");
    message.setStatus("5"); //"5" means Draft
    message.setToAddress("to@email.com");
    saveResult = connection.create(new SObject[] { message });
    String emailMessageId = saveResult[0].getId();

    //Create an attachment for the draft EmailMessage
    Attachment att = new Attachment();
    byte[] fileBody = new byte[1000000];
    att.setBody(fileBody);
    att.setName("attachment");
    att.setParentId(emailMessageId);
    connection.create(new SObject[] { att });

    //Send the draft EmailMessage
    SendEmailResult[] results = connection.sendEmailMessage(messages);
    if (results[0].isSuccess()) {
       System.out.println("The email was sent successfully.");
    } else {
       System.out.println("The email failed to send: " +
          results[0].getErrors()[0].getMessage());
    }
 } catch (ConnectionException ce) {
    ce.printStackTrace();
 }
```

Arguments

None.

Response

SendEmailResult[]

Fault

BCC_NOT_ALLOWED_IF_BCC_COMPLIANCE_ENABLED

BCC_SELF_NOT_ALLOWED_IF_BCC_COMPLIANCE_ENABLED

EMAIL_NOT_PROCESSED_DUE_TO_PRIOR_ERROR

ERROR_IN_MAILER

INSUFFICIENT_ACCESS_ON_CROSS_REFERENCE_ENTITY

INVALID_CONTENT_TYPE

INVALID_EMAIL_ADDRESS

INVALID_ID_FIELD

INVALID_MESSAGE_ID_REFERENCE

LIMIT_EXCEEDED

MALFORMED_ID

REQUIRED_FIELD_MISSING

SINGLE_EMAIL_LIMIT_EXCEEDED

TEMPLATE_NOT_ACTIVE

UNVERIFIED_SENDER_ADDRESS

setPassword()

Sets the specified user's password to the specified value.

Syntax

```
SetPasswordResult setPasswordResult = connection.setPassword(ID userID, string password);
```

Usage

Use `setPassword()` to change the password of a User or SelfServiceUser to a value that you specify. For example, a client application might prompt a user to specify a different password, and then invokes `setPassword()` for an admin to change the user's password. Use `resetPassword()` instead if you want to reset the password with a random value generated by the API.

This call can be used to allow users to change their own passwords, as long as their org's Password Policies setting **Allow use of setPassword() API for self-resets** is enabled. Otherwise, use `changeOwnPassword()`, which is more secure because it verifies the user's current password before allowing the change.

Your client application must be logged in with sufficient access rights to change the password for the specified user. For more information, see Factors that Affect Data Access.

For information on IDs, see ID Field Type.

This call can use the session ID returned in LoginResult if the password has expired. For more information, see `passwordExpired`.

Sample Code—Java

This sample accepts user ID and password parameters, which it uses in the `setPassword()` call to set the password of the specified user.

```
public void doSetPassword(String userId, String newPasswd) {
   try {
      SetPasswordResult result = connection.setPassword(userId, newPasswd);
      System.out.println("The password for user ID " + userId + " changed to "
            + newPasswd);
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Sample Code—C#

This sample accepts user ID and password parameters, which it uses in the `setPassword()` call to set the password of the specified user.

```
public void doSetPassword(String userId, String newPasswd)
{
   try
   {
      SetPasswordResult result = binding.setPassword(userId, newPasswd);
      Console.WriteLine("The password for user ID " + userId + " changed to "
            + newPasswd);
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                        e.Message + "\n" + e.StackTrace);
   }
}
```

Arguments

Name	Type	Description
`userID`	ID	ID of the User or SelfServiceUser whose password you want to reset. For information on IDs, see ID Field Type.
`password`	string	New password to use for the specified user.

Response

SetPasswordResult (empty)

Fault

`InvalidIdFault`

`UnexpectedErrorFault`

SEE ALSO:

- resetPassword()
- Utility Calls
- changeOwnPassword()

CHAPTER 14 SOAP Headers

The API provides SOAP headers to client applications.

Header	Description
AllOrNoneHeader	Specifies whether a call rolls back all changes unless all records are processed successfully. This header is available in API version 20.0 and later.
AllowFieldTruncationHeader	Specifies the truncation behavior for some field types in API version 15.0 and later.
AssignmentRuleHeader	Specifies the assignment rule to use when creating or updating an Account, Case, or Lead.
CallOptions	Specifies the call options for an API request.
DebuggingHeader	Returns the debug log in the output header, `DebuggingInfo`, and specifies the level of detail in the debug log.
DisableFeedTrackingHeader	Specifies whether the changes made in the current call are tracked in feeds.
DuplicateRuleHeader	Determines options for using duplicate rules to detect duplicate records. Duplicate rules are part of the Duplicate Management feature.
EmailHeader	Sends an email notification when a request is processed. Provides equivalent functionality for the Salesforce user interface.
LimitInfoHeader	A response header returned from calls to SOAP API. This header returns limit information for the organization. Use this header to monitor your API limits as you make calls against the organization.
LocaleOptions	Specifies the language of the labels returned. The value must be a valid user locale (language and country), such as `de_DE` or `en_GB`. For more information on locales, see the `Language` field on the CategoryNodeLocalization object.
LoginScopeHeader	Specifies the organization ID so that you can authenticate Self-Service users for your organization using the `login()` call.
MruHeader	Indicates whether to update the list of most recently used items (`true`) or not (`false`).
OwnerChangeOptions	Specifies ownership of attachments and notes.
PackageVersionHeader	Specifies the package version for each installed managed package in API version 16.0 and later.
QueryOptions	Specifies the batch size for query results.
SessionHeader	Specifies the session ID returned from the login server after a successful `login()`.

Header	Description
UserTerritoryDeleteHeader	Specifies a user to whom open opportunities are assigned when the current owner is removed from a territory.

AllOrNoneHeader

Allows a call to roll back all changes unless all records are processed successfully.

Without the AllOrNoneHeader header, records without errors are committed, while records with errors are marked as failed in the call results. This header is available in API version 20.0 and later.

Even if the header is enabled, it's still necessary to inspect the `success` field in the call result for each record to identify records with errors. Each `success` field contains `true` or `false` indicating whether the call was processed successfully.

If there is an error associated with at least one record, the `errors` field in the call result for the record gives more information on the error. If other records in the same call have no errors, their `errors` fields indicate that they were rolled back due to other errors.

API Calls

`create()`, `delete()`, `undelete()`, `update()`, `upsert()`

Fields

Element Name	Type	Description
`allOrNone`	boolean	If `true`, any failed records in a call cause all changes for the call to be rolled back. Record changes aren't committed unless all records are processed successfully. The default is `false`. Some records can be processed successfully while others are marked as failed in the call results.

Sample Code—Java

This sample shows how to use the `AllOrNoneHeader`. It attempts to create two contacts. The second contact doesn't have all required fields set and causes a failure on creation. Next, the sample sets the `allOrNone` field to `true`, and then attempts to create the contacts. Creating one of the contacts results in an error, so the entire transaction is rolled back and no contacts are created.

```
public void allOrNoneHeaderSample() {
  try {
    // Create the first contact.
    SObject[] sObjects = new SObject[2];
    Contact contact1 = new Contact();
    contact1.setFirstName("Robin");
    contact1.setLastName("Van Persie");

    // Create the second contact. This contact doesn't
    // have a value for the required
```

```
      // LastName field so the create will fail.
      Contact contact2 = new Contact();
      contact2.setFirstName("Ashley");
      sObjects[0] = contact1;
      sObjects[1] = contact2;

      // Set the SOAP header to roll back the create unless
      // all contacts are successfully created.
      connection.setAllOrNoneHeader(true);
      // Attempt to create the two contacts.
      SaveResult[] sr = connection.create(sObjects);
      for (int i = 0; i < sr.length; i++) {
        if (sr[i].isSuccess()) {
          System.out.println("Successfully created contact with id: " +
            sr[i].getId() + ".");
        }
        else {
          // Note the error messages as the operation was rolled back
          // due to the all or none header.
          System.out.println("Error creating contact: " +
            sr[i].getErrors()[0].getMessage());
          System.out.println("Error status code: " +
            sr[i].getErrors()[0].getStatusCode());
        }
      }
    } catch (ConnectionException ce) {
      ce.printStackTrace();
    }
  }
}
```

AllowFieldTruncationHeader

Specifies that for some fields, when a string is too large, the operation fails. Without the header, strings for these fields are truncated.

The `AllowFieldTruncationHeader` header affects the following datatypes:

- anyType, if it represents one of the other datatypes in this list
- email
- encryptedstring
- multipicklist
- phone
- picklist
- string
- textarea

In API versions previous to 15.0, if a value for one of the listed fields is too large, the value is truncated.

For API version 15.0 and later, if a value is too large, the operation fails and the fault code `STRING_TOO_LONG` is returned. `AllowFieldTruncationHeader` allows you to specify that the previous behavior, truncation, be used instead of the new behavior in API versions 15.0 and later.

This header has no effect in versions 14.0 and earlier.

API Calls

convertLead(), create(), merge(), process(), undelete(), update(), and upsert()

Apex: executeanonymous()

Fields

Element Name	Type	Description
allowFieldTruncation	boolean	If true, truncate field values that are too long, which is the behavior in API versions 14.0 and earlier. Default is false: no change in behavior. If a string or textarea value is too large, the operation fails and the fault code STRING_TOO_LONG is returned. The following list shows the field types affected by truncation and this header: • anyType, if it represents one of the other datatypes in this list • email • encryptedstring • multipicklist • phone • picklist • string • textarea

Sample Code—Java

To create an account with a name that is too long for the Name field, use the AllowFieldTruncation header.

This sample:

1. Creates an Account object with a name that exceeds the field limit of 255 characters.
2. Sends the create call, which fails because of the name field length.
3. Sets the AllowFieldTruncationHeader to true and retries the account creation, which succeeds.

```
public void allowFieldTruncationSample() {
  try {
    Account account = new Account();
    // Construct a string that is 256 characters long.
    // Account.Name's limit is 255 characters.
    String accName = "";
    for (int i = 0; i < 256; i++) {
      accName += "a";
    }
    account.setName(accName);
    // Construct an array of SObjects to hold the accounts.
```

```
    SObject[] sObjects = new SObject[1];
    sObjects[0] = account;
    // Attempt to create the account. It will fail in API version 15.0
    // and above because the account name is too long.
    SaveResult[] results = connection.create(sObjects);
    System.out.println("The call failed because: "
       + results[0].getErrors()[0].getMessage());
    // Now set the SOAP header to allow field truncation.
    connection.setAllowFieldTruncationHeader(true);
    // Attempt to create the account now.
    results = connection.create(sObjects);
    System.out.println("The call: " + results[0].isSuccess());
  } catch (ConnectionException ce) {
    ce.printStackTrace();
  }
}
```

AssignmentRuleHeader

The `AssignmentRuleHeader` must be specified in the `create()` or `update()` call of a Case or Lead for the specified assignment rule to be applied, and it must be specified in the `update()` call of an Account for the territory assignment rules to be applied.

API Calls

`create()`, `merge()`, `update()`, `upsert()`

Fields

Element Name	Type	Description
`assignmentRuleId`	ID	The ID of a specific assignment rule to run for the Case or Lead. The assignment rule can be active or inactive. The ID can be retrieved by querying the AssignmentRule object. If specified, do not specify `useDefaultRule`. This element is ignored for accounts, because all territory assignment rules are applied. If the value is not in correct ID format (15-character or 18-character Salesforce ID), the call fails and a `MALFORMED_ID` exception is returned.
`useDefaultRule`	boolean	If `true` for a Case or Lead, uses the default (active) assignment rule for a Case or Lead. If specified, do not specify an `assignmentRuleId`. If `true` for an Account, all territory assignment rules are applied, and if `false`, no territory assignment rules are applied.

Sample Code

For a code example, see Lead.

SEE ALSO:

AssignmentRule

CallOptions

Specifies the options needed to work with a specific client. This header is only available for use with the Partner WSDL.

API Calls

The `defaultNamespace` element supports the following calls: `create()`, `merge()`, `queryAll()`, `query()`, `queryMore()`, `retrieve()`, `search()`, `update()`, and `upsert()`.

The `client` element supports all of the above calls, plus the following: `convertLead()`, `login()`, `delete()`, `describeGlobal()`, `describeLayout()`, `describeTabs()`, `describeSObject()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `process()`, `undelete()`, `getServerTimestamp()`, `getUserInfo()`, `setPassword()`, and `resetPassword()`.

Fields

Element Name	Type	Description
`client`	string	A string that identifies a client.
`defaultNamespace`	string	A string that identifies a developer namespace prefix. Use this field to resolve field names in managed packages without having to fully specify the `fieldName` everywhere. For example, if the developer namespace prefix is `battle`, and you have a custom field in your package called `botId`, you can set this header, and then queries such as the following will succeed: `query("SELECT id, botId__c from Account");` In this case the actual field queried is the `battle__botId__c` field. Using this field allows you to write client code without having to specify the namespace prefix. Without this field specified, the full name of the field would have to be used for the query to succeed. In the example above, you would have to specify `battle__botId__c`. Note that if this field is set, and the query specifies the namespace as well, the response will not include the prefix. For example, if you set this header to `battle`, and issue a query like `query("SELECT id, battle__botId__c from Account");`, the response would use a `botId__c` element, not a `battle_botId__c` element. Describe calls ignore this header, so there will be no ambiguity between fields with namespace prefixes and customer fields of the same name without the prefix.

Sample Code—C#

This sample shows how to use the `CallOptions` header. It sets a client ID and a developer namespace prefix, which is used to resolve field names in managed packages. Next, the sample logs the specified user in.

```
public void CallOptionsSample()
{
    // Web Reference to the imported Partner WSDL.
    APISamples.partner.SforceService partnerBinding;

    string username = "USERNAME";
    string password = "PASSWORD";

    // The real Client ID will be an API Token provided by salesforce.com
    // to partner applications following a security review.
    // For more details, see the Security Review FAQ in the online help.
    string clientId = "SampleCaseSensitiveToken/100";

    partnerBinding = new SforceService();
    partnerBinding.CallOptionsValue = new CallOptions();
    partnerBinding.CallOptionsValue.client = clientId;

    // Optionally, if a developer namespace prefix has been registered for
    // your Developer Edition organization, it may also be specified.
    string prefix = "battle";
    partnerBinding.CallOptionsValue.defaultNamespace = prefix;

    try
    {
        APISamples.partner.LoginResult lr =
            partnerBinding.login(username, password);
    }
    catch (SoapException e)
    {
        Console.WriteLine(e.Code);
        Console.WriteLine(e.Message);
    }
}
```

DisableFeedTrackingHeader

Specifies that changes made in the current call are tracked in feeds.

Use this header if you want to process many records without tracking the changes in various feeds related to the records. This header is available if the Chatter feature is enabled for your organization.

API Calls

`convertLead()`, `create()`, `delete()`, `merge()`, `process()`, `undelete()`, `update()`, `upsert()`

Fields

Element Name	Type	Description
disableFeedTracking	boolean	If true, the changes made in the current call are not tracked in feeds. The default is false.

Sample Code—Java

This sample shows how to use the DisableFeedTrackingHeader. It sets this header to true to disable feed tracking and then creates many account records in bulk.

```
public void disableFeedTrackingHeaderSample() {
  try {
    // Insert a large number of accounts.
    SObject[] sObjects = new SObject[500];
    for (int i = 0; i < 500; i++)   {
       Account a = new Account();
       a.setName("my-account-" + i);
       sObjects[i] = a;
    }
    // Set the SOAP header to disable feed tracking to avoid generating a
    // large number of feed items because of this bulk operation.
    connection.setDisableFeedTrackingHeader(true);
    // Perform the bulk create. This won't result in 500 feed items, which
    // would otherwise be generated without the DisableFeedTrackingHeader.
    SaveResult[] sr = connection.create(sObjects);
    for (int i = 0; i < sr.length; i++) {
      if (sr[i].isSuccess()) {
        System.out.println("Successfully created account with id: " +
          sr[i].getId() + ".");
      } else {
        System.out.println("Error creating account: " +
          sr[i].getErrors()[0].getMessage());
      }
    }
  } catch (ConnectionException ce) {
    ce.printStackTrace();
  }
}
```

SEE ALSO:

Custom Object__Feed

EntitySubscription

DebuggingHeader

Return the debug log in the output header, DebuggingInfo, and specify the level of detail in the debug log.

Note: Calls that include DebuggingHeader are limited to 1,000 in a 24-hour period. You can continue to make these calls even after reaching the total request limit for an org.

API Calls

`compileAndTest()`, `executeanonymous()`, `runTests()`

Fields

Element Name	Type	Description
`categories`	LogInfo[]	Specifies the type and amount of information to be returned in the debug log.
`debugLevel`	DebugLevel (enumeration of type string)	Deprecated. This field is provided only for backward compatibility. If you provide values for both `debugLevel` and `categories`, the `categories` value is used. The `debugLevel` field specifies the type of information returned in the debug log. The values are listed from the least amount of information returned to the most information returned. Valid values include: • `None` • `Debugonly` • `Db` • `Profiling` • `Callout` • `Detail`

LogInfo

Specifies the type and amount of information to be returned in the debug log. The `categories` field takes a list of these objects. LogInfo is a mapping of `category` to `level`.

Fields

Element Name	Type	Description
`category`	LogCategory	Specify the type of information returned in the debug log. Valid values are: • `Db` • `Workflow` • `Validation` • `Callout` • `Apex_code` • `Apex_profiling` • `Visualforce`

Element Name	Type	Description
		• `System` • `All`
`level`	LogCategoryLevel	Specifies the level of detail returned in the debug log. Valid log levels are (listed from lowest to highest): • `NONE` • `ERROR` • `WARN` • `INFO` • `DEBUG` • `FINE` • `FINER` • `FINEST`

DuplicateRuleHeader

Determines options for using duplicate rules to detect duplicate records. Duplicate rules are part of the Duplicate Management feature.

API Calls

`create()`, `update()`, `upsert()`

Fields

Element Name	Type	Description
`allowSave`	boolean	For a duplicate rule, when the Alert option is enabled, bypass alerts and save duplicate records by setting this property to `true`. Prevent duplicate records from being saved by setting this property to `false`.
`includeRecordDetails`	boolean	Get fields and values for records detected as duplicates by setting this property to `true`. Get only record IDs for records detected as duplicates by setting this property to `false`.
`runAsCurrentUser`	boolean	Make sure that sharing rules for the current user are enforced when duplicate rules run by setting this property to `true`. Use the sharing rules specified in the class for the request by setting this property to `false`. If no sharing rules are specified, Apex code runs in system context and sharing rules for the current user are not enforced.

Java Sample

This sample shows how to use the `DuplicateRuleHeader` to set options for using duplicate rules. To see the entire sample application, see DuplicateResult.

```
_DuplicateRuleHeader header = new _DuplicateRuleHeader();
        header.setAllowSave(false);
        header.setIncludeRecordDetails(true);
        header.setRunAsCurrentUser(true);

        binding.setHeader(new SforceServiceLocator().getServiceName().getNamespaceURI(),
"DuplicateRuleHeader", header);
```

SEE ALSO:

DuplicateResult

DuplicateRule

EmailHeader

The Salesforce user interface allows you to specify whether to send an email when these events occur:

- Create a Case
- Create a CaseComment
- Convert Case email to a Contact
- Send a New User email notification
- Make a `resetPassword()` call

In API versions 8.0 and later, you can also send an API request that sends email.

A group event is an Event for which `IsGroupEvent` is true. The EventRelation object tracks the users, leads, or contacts that are invited to a group event. Note the following behaviors for group event email sent through the API:

- Sending a group event invitation to a User respects the `triggerUserEmail` option
- Sending a group event invitation to a Lead or Contact respects the `triggerOtherEmail` option
- Email sent when updating or deleting a group event also respect `triggerUserEmail` and `triggerOtherEmail`, as appropriate

API Calls

`create()`, `delete()`, `resetPassword()`, `update()`, `upsert()`

Fields

Element Name	Type	Description
`triggerAutoResponseEmail`	boolean	Indicates whether to trigger auto-response rules (`true`) or not (`false`), for leads and cases. In the Salesforce user interface, this email can be automatically triggered by a number of events, for example creating a case or resetting a

Element Name	Type	Description
		user password. If this value is set to `true`, when a Case is created, if there is an email address for the contact specified in `ContactId`, the email is sent to that address. If not, the email is sent to the address specified in `SuppliedEmail`.
`triggerOtherEmail`	boolean	Indicates whether to trigger email outside the organization (`true`) or not (`false`). In the Salesforce user interface, this email can be automatically triggered by creating, editing, or deleting a contact for a case.
`triggerUserEmail`	boolean	Indicates whether to trigger email that is sent to users in the organization (`true`) or not (`false`). In the Salesforce user interface, this email can be automatically triggered by a number of events; resetting a password, creating a new user, or adding comments to a case.

Sample Code—Java

This sample shows how to use the `EmailHeader`. It sets the `triggerAutoResponseEmail` email header field to `true`, which triggers an email to be sent when a case is created. Next, it creates a case. This sample assumes an auto-response rule has been set for cases, and an email address is specified in the contact referenced by `ContactId`.

```
public void createCaseWithAutoResponse(String contactId) {
  try {
    connection.setEmailHeader(true, false, false);
    Case c = new Case();
    c.setSubject("Sample Subject");
    c.setContactId(contactId);
    SaveResult[] sr = connection.create(new SObject[] { c });
    // Parse sr array to see if case was created successfully.
  } catch (ConnectionException ce) {
    ce.printStackTrace();
  }
}
```

LimitInfoHeader

A response header returned from calls to SOAP API. This header returns limit information for the organization. Use this header to monitor your API limits as you make calls against the organization.

API Calls

All calls, except for `login()`.

Fields

Element Name	Type	Description
`current`	string	The number of calls for the specified limit type that have already been used in the organization.
`limit`	string	The organization's limit for the specified limit type.
`type`	string	The type of limit information specified in the header. • `API REQUESTS`— the daily API usage for the organization against which the call was made.

Sample Code

This example shows a response to a SOAP request for a Merchandise record. The `LimitInfoHeader` contains the API usage information for the organization.

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
   xmlns="urn:partner.soap.sforce.com" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

    xmlns:sf="urn:sobject.partner.soap.sforce.com">
    <soapenv:Header>
        <LimitInfoHeader>
            <limitInfo>
                <current>5</current>
                <limit>100000</limit>
                <type>API REQUESTS</type>
            </limitInfo>
    </soapenv:Header>
    <soapenv:Body>
        <queryResponse>
            <result xsi:type="QueryResult">
                <done>true</done>
                <queryLocator xsi:nil="true"/>
                <records xsi:type="sf:sObject">
                    <sf:type>dev_ns__Merchandise__c</sf:type>
                    <sf:Id>a00D0000008pQSNIA2</sf:Id>
                    <sf:dev_ns__Description__c>Phone Case for iPhone
                        4/4S</sf:dev_ns__Description__c>
                    <sf:dev_ns__Price__c>16.99</sf:dev_ns__Price__c>
                    <sf:dev_ns__Stock_Price__c>12.99</sf:dev_ns__Stock_Price__c>
                    <sf:dev_ns__Total_Inventory__c>108.0</sf:dev_ns__Total_Inventory__c>
                    <sf:Id>a00D0000008pQSNIA2</sf:Id>
                </records>
                <size>1</size>
            </result>
        </queryResponse>
    </soapenv:Body>
</soapenv:Envelope>
```

LocaleOptions

Specifies the language of the labels returned.

API Calls

describeSObject(), describeSObjects(), describeDataCategoryGroups(), describeDataCategoryGroupStructures()

Fields

Element Name	Type	Description
language	string	Specifies the language of the labels returned. The value must be a valid user locale (language and country), such as de_DE or en_GB. For more information on locales, see the Language field on the CategoryNodeLocalization object.

Sample Code—Java

This sample sets the LocaleOptions header to the locale of the logged-in user, and then performs a describe on Account.

```
public void localeOptionsExample() {
  try {
    connection.setLocaleOptions("en_US");
    connection.describeSObject("Account");
  } catch (ConnectionException ce) {
    ce.printStackTrace();
  }
}
```

LoginScopeHeader

Specifies your organization ID so that you can authenticate Self-Service users for your organization using the existing login().

Note: Starting with Spring '12, the Self-Service portal isn't available for new Salesforce orgs. Existing orgs continue to have access to the Self-Service portal.

API Calls

login()

Fields

Element Name	Type	Description
organizationId	ID	The ID of the organization against which you authenticate Self-Service users.

Element Name	Type	Description
`portalId`	ID	Specify only if user is a Customer Portal user. The ID of the portal for this organization. The ID is available in the Salesforce user interface: • From Setup, enter *Customer Portal Settings* in the `Quick Find` box, then select **Customer Portal Settings** • Select a Customer Portal name, and on the Customer Portal detail page, the URL of the Customer Portal displays. The Portal ID is in the URL.

Sample Code—C#

This sample shows how to use the `LoginScopeHeader`. It sets the organization ID and the portal ID for a Customer Portal user. It also sets the `CallOptions` header. It then logs the specified user in.

```
/// Demonstrates how to set the LoginScopeHeader values.
public void LoginScopeHeaderSample()
{
    // Web Reference to the imported Partner WSDL.
    APISamples.partner.SforceService partnerBinding;

    string username = "USERNAME";
    string password = "PASSWORD";

    // The real Client ID will be an API Token provided by salesforce.com
    // to partner applications following a security review. For more details,
    // see the Security Review FAQ in the online help.
    string clientId = "SampleCaseSensitiveToken/100";

    partnerBinding = new SforceService();
    partnerBinding.CallOptionsValue = new CallOptions();
    partnerBinding.CallOptionsValue.client = clientId;

    // To authenticate Self-Service users, we need to set the OrganizationId
    // in the LoginScopeHeader.
    string orgId = "00ID0000OrgFoo";
    partnerBinding.LoginScopeHeaderValue = new LoginScopeHeader();
    partnerBinding.LoginScopeHeaderValue.organizationId = orgId;
    // Specify the Portal ID if the user is a Customer Portal user.
    string portalId = "00ID0000FooPtl";
    partnerBinding.LoginScopeHeaderValue.portalId = portalId;

    try
    {
        APISamples.partner.LoginResult lr =
            partnerBinding.login(username, password);
    }
    catch (SoapException e)
    {
        Console.WriteLine(e.Code);
        Console.WriteLine(e.Message);
```

```
    }
}
```

MruHeader

In API version 7.0 and later, the `create()`, `update()`, and `upsert()` calls do not update the list of most recently used (MRU) items in the Recent Items section of the sidebar in the Salesforce user interface unless this header is used. Be advised that using this header to update the Recent Items list may negatively impact performance.

API Calls

`create()`, `merge()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Element Name	Type	Description
`updateMru`	boolean	Indicates whether to update the list of most recently used items (`true`) or not (`false`). For `retrieve()`, if the result has only one row, the MRU is updated to the ID of the retrieve result. For `query()`, if the result has only one row and the ID field is selected, the MRU is updated to the ID of the query result.

Sample Code—Java

This sample turns on the MRU list update option by setting the `MruHeader` to `true`. Next, it creates an account.

```
public void mruHeaderSample() {
  connection.setMruHeader(true);
  Account account = new Account();
  account.setName("This will be in the MRU");
  try {
    SaveResult[] sr = connection.create(new SObject[]{account});
    System.out.println("ID of account added to MRU: " +
      sr[0].getId());
  } catch (ConnectionException ce) {
    ce.printStackTrace();
  }
}
```

OwnerChangeOptions

Represents actions that can be performed when a record's owner is changed. Available with these options in API version 35.0 and later.

API Calls

`update()`, `upsert()`

Fields

Element Name	Type	Description
`options`	OwnerChangeOption[]	Represents a flag for a specific action performed when changing a record owner through an update or upsert call.

OwnerChangeOption Fields

Element Name	Type	Description
`execute`	boolean	If `true`, the action represented by the `type` field is performed. If `false`, the action represented by the `type` field is skipped.
`type`	enum of a string	Represents the action performed or skipped, according to the given value for the execute field, when changing a record owner during an update or upsert call. The following types can be used. **EnforceNewOwnerHasReadAccess** If `true`, the record's new owner must have at least read access on the record. Available in API version 36.0 and later. **KeepAccountTeam** If `true`, the account team is kept with the account when the account owner is changed. If `false`, the account team is deleted. Default is `false`. Available for accounts in API version 45.0 and later. **KeepSalesTeam** If `true`, the opportunity team is kept with the opportunity when the account owner is changed. If `false`, the opportunity team is deleted. Default is `false`. Available for opportunities in API version 45.0 and later. **KeepSalesTeamGrantCurrentOwnerReadWriteAccess** If `true`, the opportunity's previous owner retains read/write access after the owner is changed. Default is `false`. Can be `true` only when KeepSalesTeam is `true`. Available for opportunities in API version 44.0 and later. **SendEmail** If `true`, an email notification is sent to the new owner. Default is `false`. **TransferAllOwnedCases** If `true`, all cases (open and closed) owned by the account owner are transferred to the new owner. Default is `false`. When TransferAllOwnedCases is `true`, TransferOwnedOpenCases must also be true. Available for accounts in API version 45.0 and later.

Element Name	Type	Description
		TransferArticleOwnedPublishedVersion If `true` and the record is a Knowledge article, the article owner's published version for the language of the current draft is transferred to the new owner, in addition to the current draft. **TransferArticleOwnedArchivedVersions** If `true` and the record is a Knowledge article, the article owner's archived versions for the language of the current draft are transferred to the new owner, in addition to the current draft. **TransferArticleAllVersions** If `true` and the record is a Knowledge article, all published and archived versions owned by anyone for the language of the current draft are transferred to the new owner, in addition to the current draft. **TransferContacts** If `true` and the record is a business account, contacts associated with the account are transferred to the new owner. **TransferContracts** If `true` and the record is an account, contracts associated with the account and owned by the account owner are transferred to the new owner. **TransferNotesAndAttachments** If `true`, the record's notes, attachments, and Google Docs are transferred to the new record owner. If `false`, the original record owner retains ownership. **TransferOpenActivities** If `true`, the record's open activities are transferred to the new owner. **TransferOrders** If `true` and the record is an account, the draft standalone orders associated with the account and draft orders associated with transferred contracts owned by the account owner are transferred to the new owner. **TransferOtherOpenOpportunities** If `true` and the record is an account, open opportunities associated with the account and not owned by the current owner are transferred to the new owner. When this option is executed, TransferOwnedOpenOpportunities must be set to execute. Default is `false`. **TransferOwnedClosedOpportunities** If `true` and the record is an account, closed opportunities owned by the account owner are transferred to the new owner. Default is `false`. Available for API version 45.0 and later. **TransferOwnedOpenCases** If `true` and the record is an account, open cases owned by the account owner are transferred to the new owner. Default is `false`. Available for API version 45.0 and later. **TransferOwnedOpenOpportunities** If `true` and the record is an account, open opportunities associated with the account and owned by the account owner are transferred to the new owner.

Sample Code—Java

This sample creates an account, a note, an opportunity, and task for the account. It sets the owner change options so that the note, opportunity, and task are transferred to the new owner along with the account.

```
public void ownerChangeOptionsHeaderSample() {

   // Create account. Accounts don't transfer activities, notes, or attachments by default



    Account account = new Account();
    account.setName("Account");
    com.sforce.soap.enterprise.SaveResult[] sr = connection.create(new
com.sforce.soap.enterprise.sobject.SObject[] { account } );
    String accountId = null;

    if(sr[0].isSuccess()) {
        System.out.println("Successfully saved the account");
        accountId = sr[0].getId();

        // Create a note, a task, and an opportunity for the account

        Note note = new Note();
        note.setTitle("Note Title");
        note.setBody("Note Body");
        note.setParentId(accountId);

        Task task = new Task();
        task.setWhatId(accountId);

  Opportunity opportunity = new Opportunity();
        opportunity.setName("Opportunity");
        opportunity.setStageName("Prospecting");
        Calendar dt = connection.getServerTimestamp().getTimestamp();
        dt.add(Calendar.DAY_OF_MONTH, 7);
        opportunity.setCloseDate(dt);
        opportunity.setAccountId(accountId);

        sr = connection.create(new com.sforce.soap.enterprise.sobject.SObject[] { note,
task, opportunity } );

        if(sr[0].isSuccess()) {
           System.out.println("Successfully saved the note, task, and opportunity");


           com.sforce.soap.enterprise.QueryResult qr = connection.query("SELECT Id FROM
User WHERE FirstName = 'Jane' AND LastName = 'Doe'");
           String newOwnerId = qr.getRecords()[0].getId();
           account.setId(accountId);
           account.setOwnerId(newOwnerId);

           // Set owner change options so account's child note, task, and opportunity
transfer to new owner
        OwnerChangeOption opt1 = new OwnerChangeOption();
```

```
        opt1.setExecute(true);
        opt1.setType(OwnerChangeOptionType.TransferOwnedOpenOpportunities); // Transfer
Open opportunities owned by the account's owner

        OwnerChangeOption opt2 = new OwnerChangeOption();
        opt2.setExecute(true);
        opt2.setType(OwnerChangeOptionType.TransferOpenActivities);

        OwnerChangeOption opt3 = new OwnerChangeOption();
        opt3.setExecute(true);
        opt3.setType(OwnerChangeOptionType.TransferNotesAndAttachments);

        connection.setOwnerChangeOptions(new OwnerChangeOption[] {opt1, opt2, opt3});
           connection.update(new com.sforce.soap.enterprise.sobject.SObject[] { account }
 );

           // The account's note, task, and opportunity should be transferred to the new
owner.
        }

    } else {
        System.out.println("Account save failed: " + sr[0].getErrors().toString());
     }
}
```

PackageVersionHeader

Specifies the package version for each installed managed package.

A managed package can have several versions with different content and behavior. This header allows you to specify the version used for each package referenced by your API client.

If a package version is not specified, the API client uses the version of the package specified in Setup (enter *API* in the Quick Find box, then select **API**).

This header is available in API version 16.0 and later.

Associated API Calls

convertLead(), create(), delete(), describeGlobal(), describeLayout(), describeSObject(), describeSObjects(), describeSoftphoneLayout(), describeTabs(), merge(), process(), query(), retrieve(), search(), undelete(), update(), upsert()

Fields

Element Name	Type	Description
packageVersions	PackageVersion[]	A list of package versions for installed managed packages referenced by your API client.

PackageVersion

Specifies a version of an installed managed package. A package version is `majorNumber.minorNumber`, for example `2.1`.

Fields

Field	Type	Description
`majorNumber`	int	The major version number of a package version.
`minorNumber`	int	The minor version number of a package version.
`namespace`	string	The unique namespace of the managed package.

Sample Code—Java

This sample sets the package version for one installed package in the `PackageVersionHeader`. Next, it executes the code passed into this method via the `executeAnonymous` Apex method.

```
public void PackageVersionHeaderSample(String code) throws Exception
{
    _PackageVersionHeader pvh = new _PackageVersionHeader();
    PackageVersion pv = new PackageVersion();
    pv.setNamespace("installedPackageNamespaceHere");
    pv.setMajorNumber(1);
    pv.setMinorNumber(0);
    // In this case, we are only referencing one installed package.
    PackageVersion[] pvs = new PackageVersion[]{pv};
    pvh.setPackageVersions(pvs);

    apexBinding.setHeader(new SforceServiceLocator().getServiceName().getNamespaceURI(),
        "PackageVersionHeader", pvh);
    // Execute the code passed into the method.
    ExecuteAnonymousResult r = apexBinding.executeAnonymous(code);
    if (r.isSuccess()) {
        System.out.println("Code executed successfully");
    }
    else {
        System.out.println("Exception message: " + r.getExceptionMessage());
        System.out.println("Exception stack trace: " + r.getExceptionStackTrace());
    }
}
```

QueryOptions

Specifies the preferred batch size for queries. The system sometimes creates batches that are larger or smaller than the specified size to maximize performance.

Associated API Calls

`query()`, `queryMore()`, `retrieve()`

Fields

Element Name	Type	Description
`batchSize`	int	The batch size for the number of records returned in a `query()` or `queryMore()` call. Child objects count toward the number of records for the batch size. For example, in relationship queries, multiple child objects are returned per parent row returned. The default is 500; the minimum is 200, and the maximum is 2,000. There is no guarantee that the requested batch size requested is the actual batch size; changes are sometimes made to maximize performance.

Sample Code

For code examples, see Change the Batch Size in Queries in the *Salesforce SOQL and SOSL Reference Guide*.

SessionHeader

Specifies the session ID returned from the login server after a successful `login()`. This session ID is used in all subsequent calls.

In version 12.0 and later, include the API namespace in the SOAP message associated with this header. The namespace is defined in the enterprise or partner WSDL.

API Calls

All calls, including utility calls.

Fields

Element Name	Type	Description
`sessionId`	string	Session ID returned by the `login()` call to be used for subsequent call authentication.

Sample Code

See the examples provided for `login()`.

UserTerritoryDeleteHeader

Note: The original territory management feature is scheduled for retirement for all customers as of Summer '21. After the feature is retired, users can't access the original territory management feature and its underlying data. We encourage you to migrate to Enterprise Territory Management. We also strongly recommend that you keep a comprehensive backup of your territory data while you're still using the original territory management feature. For more information, see The Original Territory Management Module

Will Be Retired in the Summer '21 Release. The information in this topic applies to the original territory management feature only, and not to Enterprise Territory Management.

Specify a user to whom open opportunities are assigned when the current owner is removed from a territory. If this header is not used or the value of its element is null, the opportunities are transferred to the forecast manager in the territory above, if one exists. If one does not exist, the user being removed from the territory keeps the opportunities.

API Calls

`delete()`

Fields

Element Name	Type	Description
`transferToUserId`	ID	The ID of the user to whom open opportunities in that user's territory will be assigned when an opportunity's owner (user) is removed from a territory.

USING THE API WITH SALESFORCE FEATURES

CHAPTER 15 Implementation Considerations

In this chapter ...

Before you build an integration app or other client app, consider the data management, use limits, and communication issues explained in this section.

Choosing a User for an Integration

When your client app connects to the API, it must first log in. You must specify a user to log in to Salesforce when calling `login()`. Client apps run with the permissions and sharing of the logged-in user. Use the following sections to help decide how to configure a user for your client app.

Permissions

As an org's Salesforce admin, you control which features and views are available to users by configuring profiles and permission sets and assigning users to them. To access the API to issue calls and receive the call results, a user must have the API Enabled permission. Client apps can query or update only those objects and fields to which they have access via the permissions of the logged-in user.

If the client application logs in as a user who has access to data via a sharing rule, then the API must issue an extra query to check access. To avoid this, log in as a user with the "Modify All Data" permission. This can speed up the call response time. If providing the Modify All Data permission is too permissive for a particular user, consider using the Modify All object-level permission to restrict data access on an object basis. For more information, see Factors that Affect Data Access.

Limits

Salesforce limits the number of queries that a user can execute concurrently. A user can have up to 10 query cursors open at a time. If 10 `QueryLocator` cursors are open when a client application, logged in as the same user, attempts to open a new one, then the oldest of the 10 cursors is released. If the client application attempts to open the released query cursor, an error results.

Multiple client apps can log in using the same `username` argument. However, this approach increases your risk of getting errors due to query limits.

If multiple client apps are logged in with the same user, they all share the same session. If one of the client apps calls `logout()`, it invalidates the session for all the client apps. Using a different user for each client app makes it easier to avoid these limits.

Note: In addition to user limits, Salesforce limits for API requests for each org. For more information, see API Usage Metering.

Login Server URL

SOAP API provides a single login server. You can log in to any org from a single entry point without hard coding the instance. To access an org via the API, first authenticate the session by sending a `login()` request to the login server at one of the following URLs, depending on your choice of WSDL.

- `https://login.salesforce.com/services/Soap/c/51.0` (enterprise WSDL)
- `https://login.salesforce.com/services/Soap/u/51.0` (partner WSDL)

The less secure version of each URL is also supported.

```
http://login.salesforce.com/services/Soap/c/51.0
```

- `http://login.salesforce.com/services/Soap/c/51.0` (enterprise WSDL)
- `http://login.salesforce.com/services/Soap/u/51.0` (partner WSDL)

The less secure version of the URL is supported, but not recommended. It is helpful for debugging through proxy servers.

All subsequent calls to the server during the session should be made to the URL returned in the `login()` response, which points to the server instance for your org.

Log In to the Login Server

Before invoking any other calls, a client app must first invoke the `login()` call to establish a session with the login server. It then sets the returned server URL as the target server for subsequent API requests and sets the returned session ID in the SOAP header to provide server authorization for subsequent API requests. Salesforce checks the IP address from which the client app is logging in and blocks logins from unknown IP addresses. For more information, see `login()` and Step 4: Walk Through the Sample Code.

If the API blocks the login, Salesforce returns a login fault. To log in, the user must add the security token at the end of the user's password. For example, if a user's password is *mypassword* and the security token is *XXXXXXXXXX*, the user enters *mypasswordXXXXXXXXXX*. Users get their security token by changing their password or resetting their security token from the Salesforce user interface. When users change their password or reset their security token, Salesforce sends a new security token to the email address on the user's Salesforce record. The security token is valid until the user resets the security token, or changes the password, or you reset the user's password. When the security token is invalid, the user must repeat the login process. To avoid another log in, add the client's IP address to the org's list of trusted IP addresses. For more information, see Security Token.

When you are logged in, you can issue API calls. For each operation, client apps submit a synchronous request to the API, await the response, and then process the results. The API commits changed data automatically.

API calls:

- Core Calls
- Describe Calls
- Utility Calls

Typical API Call Sequence

For each call, your client app typically:

1. Prepares the request by defining request parameters, if applicable.
2. Invokes the call, which passes the request with its parameters to the Lightning Platform Web Service for processing.
3. Receives the response from the API.
4. Handles the response, either by processing the returned data (for a successful invocation) or by handling the error (for a failed invocation).

Salesforce Sandbox

Professional, Enterprise, Unlimited, and Performance Edition customers have access to the Salesforce Sandbox, which is a testing environment that offers a full or partial copy of your Salesforce org's live production data. For more information, visit the Salesforce Community website at www.salesforce.com/community or see Sandbox Types and Templates in the Salesforce Help.

To access your org's sandbox via the API, use the following URLs to make login requests.

- `https://test.salesforce.com/services/Soap/c/51.0` (enterprise WSDL)
- `https://test.salesforce.com/services/Soap/u/51.0` (partner WSDL)

Multiple Instances of Salesforce Database Servers

Although orgs are generally allocated by geographic regions, an org may be on any instance.

Content Type Requirement

In the API version 7.0 and later, all requests must contain a correct content type HTTP header, for example: `Content-Type: text/xml; charset=utf-8`. Earlier versions of the API do not enforce this requirement.

API Usage Metering

To maintain optimum performance and ensure that the Lightning Platform API is available to all our customers, Salesforce balances transaction loads by imposing two types of limits:

- Concurrent API Request Limits
- Total API Request Allocations

When a call exceeds a request limit, an error is returned.

Concurrent API Request Limits

The following table lists the limits for various types of orgs for concurrent requests (calls) with a duration of 20 seconds or longer.

Org Type	Limit
Developer Edition and Trial orgs	5
Production orgs and Sandboxes	25

Total API Request Allocations

The following table lists the limits for the total API requests (calls) per 24-hour period for an org.

Salesforce Edition	API Calls Per License Type Per 24-Hour Period	Total Calls Per 24-Hour Period
Developer Edition	N/A	15,000
• Enterprise Edition • Professional Edition with API access enabled	• Salesforce: 1,000 • Salesforce Platform: 1,000 • Lightning Platform - One App: 200 • Customer Community: 0 • Customer Community Login: 0 • Customer Community Plus: 200 • Customer Community Plus Login: 10 • External Identity 25,000 SKU: 70,000 • External Identity 250,000 SKU, 750,000 • External Identity 1,000,000 SKU: 4,000,000 • Partner Community: 200 • Partner Community Login: 10	100,000 + (number of licenses x calls per license type) + purchased API Call Add-Ons

Salesforce Edition	API Calls Per License Type Per 24-Hour Period	Total Calls Per 24-Hour Period
	• Lightning Platform Starter: 200 per member for Enterprise Edition orgs • Lightning Platform Plus: 1000 per member for Enterprise Edition orgs	
• Unlimited Edition • Performance Edition	• Salesforce: 5,000 • Salesforce Platform: 5,000 • Lightning Platform - One App: 200 • Customer Community: 0 • Customer Community Login: 0 • Customer Community Plus: 200 • Customer Community Plus Login: 10 • External Identity 25,000 SKU: 70,000 • External Identity 250,000 SKU, 750,000 • External Identity 1,000,000 SKU: 4,000,000 • Partner Community: 200 • Partner Community Login: 10 • Lightning Platform Starter: 200 per member for Unlimited and Performance Edition orgs • Lightning Platform Plus: 5,000 per member for Unlimited and Performance Edition orgs	100,000 + (number of licenses x calls per license type) + purchased API Call Add-Ons
Sandbox	N/A	5,000,000

Note: Load, performance, and other system issues can prevent you from using your entire allocation of calls in a 24–hour period.

APIs that count toward this allocation include the Lightning Platform REST API, the Lightning Platform SOAP API, Bulk API, and Bulk API 2.0. API calls issued by certain Salesforce connected apps (for example, the Salesforce mobile app) don't count. To determine which APIs affect the allocation, see Monitoring Your API Usage.

Calls that include DebuggingHeader have a separate allocation limit of 1,000 calls per 24-hour period. These calls can continue to be made after the total request limit for an org is reached.

Limits and allocations are enforced against the aggregate of all API calls made to the org in a 24-hour period. Limits and allocations are not on a per-user basis.

Monitoring Your API Usage

To better monitor your org's API usage and limits, you can use these resources:

- The API Usage section of the System Overview page in Setup.

- The API Requests, Last 24 Hours item in the Organization Detail section of the System Overview page in Setup.
- The API Request Limit per Month usage-based entitlement, which shows you your org's API calls aggregated over 30 days. This can be found on the Company Information page in Setup.
- Information returned in the `Sforce-Limit-Info` response header for REST APIs.
- Information returned in the response body (in `<type>API REQUESTS</type>`) for SOAP APIs.
- The `/limits` call in the Lightning Platform REST API.

You can configure your org so that email is sent to a designated user when the number of API requests has exceeded a specified percentage of the amount allotted. Perform this configuration from Setup by entering *API Usage Notifications* in the Quick Find box and then selecting **API Usage Notifications**.

See also the Learn About Daily Rate Limits section in the App Development Without Limits Trailhead module.

What Happens If You Reach or Exceed Your API Request Limit

If your org reaches or exceeds its daily API request limit, Salesforce still allows the operations to proceed by a certain amount, if possible. This helps avoid blocking your workflows during unexpected spikes in workloads and occasional peak periods. A hard cap is in place to safeguard platform resources and prevent API requests from exceeding the daily limit unimpeded.

> Note: The ability to go over your normal daily limit is always subject to restrictions to protect the overall health of the Salesforce instance that hosts your org. (You can monitor the health of your instance on Salesforce Trust.)
>
> This ability is designed to be used occasionally to help avoid interruptions in your workflow. Don't rely on it on an ongoing basis. To increase your allocation, contact your Salesforce account representative.
>
> This ability only applies to paid orgs in active status. It does not apply to trial orgs, Developer Edition, or sandboxes.

API request activity is aggregated into 30 day periods, starting with your contract start date, and includes calls that exceed the org's entitled limit.

Increasing Total API Request Allocations

The calculation of the API request amounts based on user licenses is designed to allow sufficient capacity for your org based on your number of users. If you need a higher amount and you don't want to purchase extra user licenses or upgrade to Performance Edition, you can purchase extra API calls. For information, contact your account representative.

Before you purchase more API calls, perform due diligence of your API usage. You can optimize a client application, whether it's your own enterprise application or partner application, to use fewer API calls and still accomplish the same work. If you use a partner product, consult with the vendor to verify that the product makes optimal use of the API. A product that makes inefficient use of the API incurs unnecessary costs for your company. Use REST API composite resources to improve your application's performance by minimizing the number of round-trips between the client and server.

Example API Usage Metering Calculations

The following examples illustrate API usage metering calculations for several scenarios.

- For an Enterprise Edition org with 15 Salesforce licenses, the request limit is 115,000 requests (100,000 plus 15 licenses x 1,000 calls).
- For a Developer Edition org that made 14,500 calls at 5:00 AM Wednesday, 499 calls at 11:00 PM Wednesday, only one more call can successfully be made until 5:00 AM Thursday.

Length of Stored Third-Party Refresh and Access Tokens

Salesforce stores third-party access and refresh tokens of up to 10,000 characters in length.

Compression

The API allows the use of compression on the request and the response, using the standards defined by the HTTP 1.1 specification. This is automatically supported by some SOAP/WSDL clients, and can be manually added to others. Visit `https://developer.salesforce.com/page/Tools` for more information on particular clients.

Compression is not used unless the client specifically indicates that it supports compression. For better performance, we suggest that clients accept and support compression as defined by the HTTP 1.1 specification.

To indicate that the client supports compression, you should include the HTTP header "Accept-Encoding: gzip, deflate" or a similar heading. The API compresses the response if the client properly specifies this header. The response includes the header "Content-Encoding: deflate" or "Content-Encoding: gzip," as appropriate. You can also compress any request by including a "Content-Encoding: deflate" or "gzip" header.

Most clients are partially constrained by their network connection, even on a corporate LAN. The API allows the use of compression to improve performance. Almost all clients can benefit from response compression, and many clients may benefit from compression of requests as well. The API supports deflate and gzip compression according the HTTP 1.1 specification.

Response Compression

The API can optionally compress responses. Responses are compressed only if the client sends an Accept-Encoding header with either gzip or deflate compression specified. The API is not required to compress the response even if you have specified Accept-Encoding, but it normally does. If the API compresses the response, it also specifies a Content-Encoding header with the name of the compression algorithm used, either gzip or deflate.

Request Compression

Clients can also compress requests. The API decompresses any requests before processing. The client must send up a Content-Encoding HTTP header with the name of the appropriate compression algorithm. For more information, see:

- Content-Encoding at: `www.w3.org/Protocols/rfc2616/rfc2616-sec14.html#sec14.11`
- Accept-Encoding at: `www.w3.org/Protocols/rfc2616/rfc2616-sec14.html#sec14.3`
- Content Codings at: `www.w3.org/Protocols/rfc2616/rfc2616-sec3.html#sec3.5`

Note: To implement request SOAP compression in a Java client with WSC (Web Service Connector), call `setCompression()` on the `Config` you use to instantiate a `Connection` object with. For an example, see `login()` sample on page 3290 code.

HTTP Persistent Connections

Most clients achieve better performance if they use HTTP 1.1 persistent connection to reuse the socket connection for multiple requests. Persistent connections are normally handled by your SOAP/WSDL client automatically. For more details, see the HTTP 1.1 specification at:

`http://www.w3.org/Protocols/rfc2616/rfc2616-sec8.html#sec8.1`

HTTP Chunking

Clients that use HTTP 1.1 may receive chunked responses. Chunking is normally handled by your SOAP/WSDL client automatically.

Internationalization and Character Sets

The API supports either full Unicode characters or ISO-8859-1 characters. The character set depends on the Salesforce instance that your org uses. If your org logs in to `ssl.salesforce.com`, your encoding is `ISO-8859-1`. All other instances use `UTF-8`. To determine the character set, call `describeGlobal()` and inspect the `encoding` value returned in DescribeGlobalResult.

If your org uses ISO-8859-1 encoding, all data sent to the API must be encoded in ISO-8859-1. Characters outside the valid ISO-8859-1 range might be truncated or cause an error.

Note: The API response is encoded in the character set used by your org (UTF-8 or ISO-8859-1). Either way, the encoded data is usually handled for you by the SOAP client.

XML Compliance

The API is based on XML, which requires all documents to be well formed. Part of that requirement is that certain Unicode characters are not allowed in an XML document, even in an escaped form, and that others must be encoded according to their location. Normally this is handled for you by any standard SOAP or XML client. Clients must be able to parse any normal XML escape sequence, and must not pass up invalid XML characters.

Some characters, as mentioned, are illegal even if they are escaped. The illegal characters include unpaired Unicode surrogates and a few other Unicode characters. All are seldom-used control characters that are usually not important in any data, and tend to cause problems with many programs. Although they are not allowed in XML documents, they are allowed in HTML documents and may be present in Salesforce data. The illegal characters will be stripped from any API response.

Illegal characters:

- `0xFFFE`
- `0xFFFF`
- Control characters `0x0 - 0x19`, except the following characters, which are legal: `0x9`, `0xA`, `0xD`, tab, newline, and carriage return)
- `0xD800 - 0xDFFF`, unless they're used to form a surrogate pair

.NET, Non-String Fields, and the Enterprise WSDL

If you use .NET with the enterprise WSDL, .NET generates a Boolean field for each non-string field. For example, if you have a date value in `MyDateField__c`, .NET generates a Boolean field called `MyDateField__cSpecified`.

The generated field value is `false` by default. If a Specified field value is `false`, then the values in the corresponding original field are not be included in the SOAP message. For example, before the values in the currency field `annualRevenue` can be included in a SOAP message generated by your client app, the value of `annualRevenueSpecified` must be set to `true`.

```
account.annualRevenue = 10000;
account.annualRevenueSpecified = true;
```

CHAPTER 16 Outbound Messaging

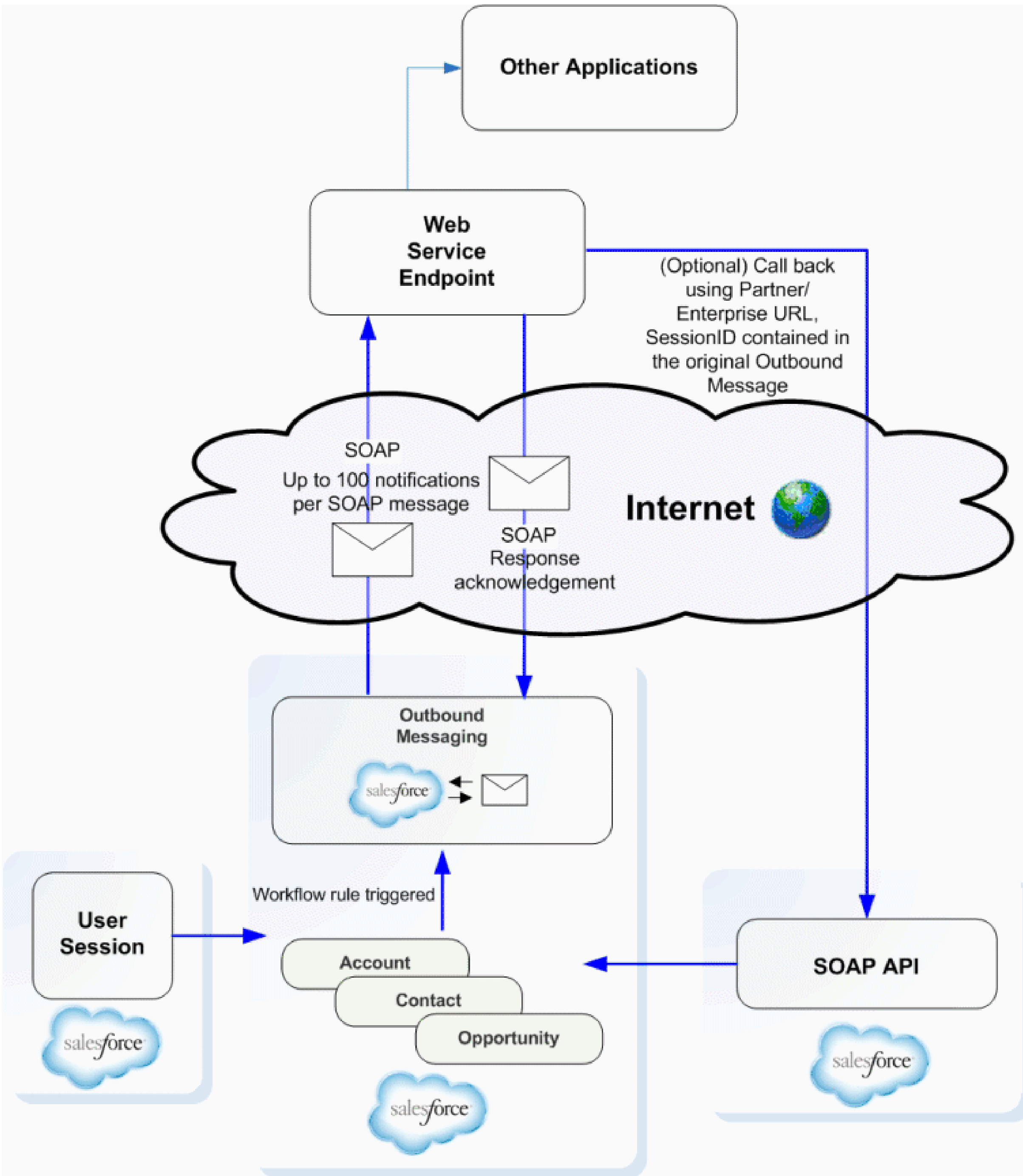
In this chapter ...

Outbound messaging allows you to specify that changes to fields within Salesforce can cause messages with field values to be sent to designated external servers.

Outbound messaging is part of the workflow rule functionality in Salesforce. Workflow rules watch for specific kinds of field changes and trigger automatic Salesforce actions, such as sending email alerts, creating task records, or sending an outbound message.

Understanding Outbound Messaging

Outbound messaging uses the `notifications()` call to send SOAP messages over HTTP(S) to a designated endpoint when triggered by a workflow rule.



After you set up outbound messaging, when a triggering event occurs, a message is sent to the specified endpoint URL. The message contains the fields specified when you created the outbound message. Once the endpoint URL receives the message, it can take the information from the message and process it. To do that, you need to examine the outbound messaging WSDL.

Understanding Notifications

A single SOAP message can include up to 100 notifications. Each notification contains the object ID and a reference to the associated sObject data. Note that if the information in the object changes after the notification is queued but before it is sent, only the updated information will be delivered.

If you issue multiple discrete calls, the calls may be batched together into one or more SOAP messages.

Messages will be queued locally. A separate background process performs the actual sending, to preserve message reliability:

- If the endpoint is unavailable, messages will stay in the queue until sent successfully, or until they are 24 hours old. After 24 hours, messages are dropped from the queue.
- If a message cannot be delivered, the interval between retries increases exponentially, up to a maximum of two hours between retries.
- Messages are retried independent of their order in the queue. This may result in messages being delivered out of order.
- You cannot build an audit trail using outbound messaging. While each message should be delivered at least once, it may be delivered more than once. Also, it may not be delivered at all if delivery cannot be done within 24 hours. Finally, as noted above, the source object may change after a notification is queued but before it is sent, so the endpoint will only receive the latest data, not any intermediate changes.
- Because a message may be delivered more than once, your listener client should check the notification IDs delivered in the notification before processing.

Note: Instead of polling, which was required in previous releases, you can now use outbound messaging to trigger execution logic when Salesforce raises an event. In previous versions of the API, client applications had to poll Salesforce to find out if relevant changes had occurred. Because most changes eventually trigger workflow if a rule exists for it, you can use this to trigger actions based on Salesforce events.

The metadata needed for outbound messaging, including the definition of the `notifications()` call, which sends the outbound SOAP message to an external service, is in a separate WSDL. The WSDL is created and available from the Salesforce user interface once a workflow rule has been associated with an outbound message. The WSDL is bound to the outbound message and contains the instructions about how to reach the endpoint service and what data is sent to it. For more information about setting up outbound messaging, see Defining Outbound Messaging.

Setting Up Outbound Messaging

Before you can use outbound messaging, you must set it up via the Salesforce user interface.

- Setting Up User Profiles
- Defining Outbound Messaging
- Downloading the Salesforce Client Certificate
- Viewing Outbound Messages
- Tracking Outbound Message Status

Setting Up User Profiles

It's possible to create circular changes with outbound messaging. For example, if a user is performing integrations that trigger workflow, and the workflow actions trigger account updates, those account updates trigger new workflow, and so on. To prevent these circular changes, you can disable a user's ability to send outbound messages.

Here's another example of a circular change scenario.

1. You configure an outbound message to include a `sessionId` and specify a user in the **User to send as** field. The user doesn't have outbound messaging disabled.
2. A change in a contact record triggers an outbound message from the specified user, with the `sessionId` to your outbound message listener.
3. Your outbound message listener calls the Lightning Platform API and updates the same contact record which triggered the outbound message.
4. The update triggers an outbound message.
5. Your outbound message listener updates the record.
6. The update triggers an outbound message.
7. Your outbound message listener updates the record.

To disable outbound message notifications for a user, deselect **Send Outbound Messages** in the user's Profile. We recommend specifying a single user to respond to outbound messages and disabling this user's ability to send outbound messages.

Defining Outbound Messaging

To define outbound messages, use this procedure in the Salesforce user interface:

1. From Setup, enter *`Outbound Messages`* in the `Quick Find` box, then select **Outbound Messages**.
2. Click **New Outbound Message**.
3. Choose the object that has the information you want included in the outbound message, and click **Next**.
4. Configure the outbound message.
   a. Enter a name and description for this outbound message.
   b. Enter an endpoint URL for the recipient of the message. Salesforce sends a SOAP message to this endpoint.

      For security reasons, Salesforce restricts the outbound ports you can specify to one of the following:

      - 80: This port only accepts HTTP connections.
      - 443: This port only accepts HTTPS connections.
      - 1024–66535 (inclusive): These ports accept HTTP or HTTPS connections.

   c. Select the Salesforce user to use when sending the message by specifying a username in the **User to send as** field. The chosen user controls data visibility for the message that is sent to the endpoint.
   d. Select **Send Session ID** if you want a `sessionId` to be included in the outbound message. Include the `sessionId` in your message if you intend to make API calls back to Salesforce from your listener. The `sessionId` represents the user defined in the previous step and not the user who triggered the workflow.
   e. Select the fields you want included in the outbound message and click **Add**.
5. Click **Save**, and review the outbound message detail page:

- The `API Version` field is automatically generated and set to the current API version when the outbound message was created. This API version is used in API calls back to Salesforce using the enterprise or partner WSDL. The `API Version` can only be modified by using the Metadata API.
- Click **Click for WSDL** to view the WSDL associated with this message.

  The WSDL is bound to the outbound message and contains the instructions about how to reach the endpoint service and what data is sent to it.

Note: If you don't have these options, your org doesn't have outbound messaging enabled. Contact Salesforce to enable outbound messaging for your org.

Downloading the Salesforce Client Certificate

Your application (endpoint) server's SSL/TLS may be configured to require client certificates (two-way SSL/TLS), in order to validate the identity of the Salesforce server when it takes the role of client to your server. If this is the case, you can download the Salesforce client certificate from the Salesforce application user interface. This is the client certificate that Salesforce sends with each outbound message for authentication.

1. From Setup, enter *`API`* in the `Quick Find` box, then select **API**.
2. On the API WSDL page, click **Manage API Client Certificate**.
3. On the Certificate and Key Management page, in the API Client Certificate section, click the **API Client Certificate**.
4. On the Certificates page, click **Download Certificate**. The .crt file is saved in the download location specified in your browser.

   Import the downloaded certificate into your application server, and configure your application server to request the client certificate. The application server then checks that the certificate used in the SSL/TLS handshake matches the one you downloaded.

Note: Your application (endpoint) server must send any intermediate certificates in the certificate chain, and the certificate chain must be in the correct order. The correct order is:

1. Server certificate
2. Intermediate certificate that signed the server certificate if the server certificate wasn't signed directly by a root certificate
3. Intermediate certificate that signed the certificate in step 2
4. Any remaining intermediate certificates

   Don't include the root certificate authority certificate. The root certificate isn't sent by your server. Salesforce already has its own list of trusted certificates on file, and a certificate in the chain must be signed by one of those root certificate authority certificates.

Viewing Outbound Messages

To view existing outbound messages, from Setup, enter *`Outbound Messages`* in the `Quick Find` box, then select **Outbound Messages** in the Salesforce user interface.

- Click **New Outbound Message** to define a new outbound message.
- Click **View Message Delivery Status** to track the status of an outbound message.
- Select an existing outbound message to view details about it or view workflow rules and approval processes that use it.
- Click **Edit** to make changes to an existing outbound message.
- Click **Del** to delete an outbound message.

Tracking Outbound Message Status

To track the status of an outbound message, from Setup, enter `Outbound Messages` in the `Quick Find` box, select **Outbound Messages**, and then click **View Message Delivery Status**. You can perform several tasks on this page.

- View the status of your outbound messages, including the total number of attempted deliveries.
- View the action that triggered the outbound message by clicking any workflow or approval process action ID.
- Click **Retry** to change the **Next Attempt** date to now. This action causes the message delivery to be immediately retried.
- Click **Del** to permanently remove the outbound message from the queue.

Considerations for Security

To use outbound messaging, ensure that no third party can send messages to the endpoint while pretending to be from Salesforce:

- Lock down the client application's listener to accept requests only from Salesforce IP ranges. While this action guarantees that the message came from Salesforce, it does not guarantee that another customer is not pointing to your endpoint and sending messages. For an up-to-date list of Salesforce IP ranges, see https://help.salesforce.com/articleView?id=000321501&type=1&mode=1
- Use SSL/TLS. Using SSL/TLS provides confidentiality while data is transported across the internet. Without it, a malicious third party can eavesdrop on your data. This issue is especially important if you pass data with privacy requirements and you pass a `SessionId` with the message. Also, we authenticate the certificate presented on connection, ensure that it is from a valid Certificate Authority, and check that the domain in the certificate matches the one Salesforce is trying to connect. This prevents us from communicating with the wrong endpoint.
- When you select **Send Session ID**, only HTTPS is supported for the endpoint URL to ensure secure transmission of the session ID. For managed and unmanaged packages created before Spring '19 with this option but without an HTTPS endpoint, subscribers can still install them. Starting in Spring '19, you can't create packages with insecure outbound message options.
- The `SessionId` included in the outbound message is scoped only for API requests and doesn't apply to UI requests.
- If the configuration of your application (endpoint) server's SSL/TLS allows, validate the identity of the Salesforce server when it takes the role of a client to your server, using the Salesforce client certificate. For instructions to download the certificate, see Downloading the Salesforce Client Certificate.
- The organization `Id` is included in each message. For more information about the Id field type, see ID Field Type. Your client application should validate that messages contain your organization `Id`.

Understanding the Outbound Messaging WSDL

The rest of this topic examines relevant sections of the outbound messaging WSDL. Your WSDL may differ, depending on the choices you made when you set up outbound messaging for a particular event on a particular object.

`notifications()`

This section defines the `notifications()` call, which creates an outbound message containing specified fields and values for a particular object or objects, and sends the values to a specified endpoint URL:

```
<schema elementFormDefault="qualified" xmlns="http://www.w3.org/2001/XMLSchema"
 targetNamespace="http://soap.sforce.com/2005/09/outbound">
   <import namespace="urn:enterprise.soap.sforce.com" />
   <import namespace="urn:sobject.enterprise.soap.sforce.com" />
```

```
            <element name="notifications">
                <complexType>
                    <sequence>
                        <element name="OrganizationId" type="ent:ID" />
                        <element name="ActionId" type="ent:ID" />
                        <element name="SessionId" type="xsd:string" nillable="true" />
                        <element name="EnterpriseUrl" type="xsd:string" />
                        <element name="PartnerUrl" type="xsd:string" />
                        <element name="Notification" maxOccurs="100"
                          type="tns:OpportunityNotification" />
                    </sequence>
                </complexType>
            </element>
        </schema>
```

Use this table to understand the elements named in the notifications method definition:

Name	Type	Description
`OrganizationId`	ID	ID of the organization sending the message.
`ActionId`	string	The workflow rule (action) that triggers the message.
`SessionId`	string	Optional, a session ID to be used by endpoint URL client that is responding to the outbound message. It is used by the receiving code to make calls back to Salesforce.
`EnterpriseURL`	string	URL to use to make API calls back to Salesforce using the enterprise WSDL.
`PartnerURL`	string	URL to use to make API calls back to Salesforce using the partner WSDL.
`Notification`	Notification	Defined in the next section, contains the object datatype and its `Id`, for example OpportunityNotification or ContactNotification.

The Notification datatype is defined in the WSDL. In the following example, a Notification for opportunities is defined, based on the Notification entry of the `notifications()` call definition:

```
            <complexType name="OpportunityNotification">
                <sequence>
                    <element name="Id" type="ent:ID" />
                    <element name="sObject" type="ens:Opportunity" />
                </sequence>
            </complexType>
```

Each object element (in our example, opportunities) contains the subset of the fields that you selected when you created the outbound message. Each message Notification also has the object ID, and this needs to be used to track redelivery attempts of notifications you've already processed.

notificationsResponse

This element is the schema for sending an acknowledgement (ack) response to Salesforce.

```
            <element name="notificationsResponse">
                <complexType>
                    <sequence>
```

```
                        <element name="Ack" type="xsd:boolean" />
                    </sequence>
                </complexType>
            </element> //This section is the last in the types definition section.
```

You acknowledge all notifications in the message if there is more than one.

Building a Listener

Once you have defined an outbound message and configured an outbound messaging endpoint, download the WSDL and create a listener:

1. Right-click **Click for WSDL** and select Save As to save the WSDL to a local directory with an appropriate file name. For example, for an outbound message that deals with leads, you could name the WSDL file `leads.wsdl`.
2. Unlike the enterprise or partner WSDLs, which describe the messages the client sends to Salesforce, this WSDL defines the messages that Salesforce will send to your client application.
3. Most Web services tools will generate stub listeners for you, in much the same way as they generate a client stub for the enterprise or partner WSDL. Look for a server side stub option.

   For example, for .Net 2.0:

   a. Run `wsdl.exe /serverInterface leads.wsdl` with .Net 2.0. This generates `NotificationServiceInterfaces.cs`, which defines the notification interface.
   b. Create a class that implements `NotificationServiceInterfaces.cs`.
   c. You implement your listener by writing a class that implements this interface. There are a number of ways to do this. One simple way is to compile the interface to a DLL first (DLLs need to be in the `bin` directory in ASP.NET).

      ```
      mkdir bin
      csc /t:library /out:bin\nsi.dll NotificationServiceInterfaces.cs
      ```

      Now write an ASMX based Web service that implements this interface. For example, in `MyNotificationListener.asmx`:

      ```
      <%@WebService class="MyNotificationListener" language="C#"%>
      class MyNotificationListener : INotificationBinding
      {             public notificationsResponse notifications(notifications n)
                    {
                           notificationsResponse r = new notificationsResponse();
                           r.Ack = true;
                           return r;
                    }
      }
      ```

      This example is a simple implementation, actual implementations will be more complex.
   d. Deploy the service by creating a new virtual directory in IIS for the directory that contains the `MyNotificationListener.asmx`.
   e. You can now test that the service is deployed by viewing the service page with a browser. For example, if you create a virtual directory `salesforce`, you'd go to `http://localhost/salesforce/MyNotificationListener.asmx`.

   The process for other Web service tools is similar, please consult the documentation for your Web service tool.

Your listener must meet these requirements:

- Must be reachable from the public Internet.

- For security reasons, Salesforce restricts the outbound ports you can specify to one of the following:
  - 80: This port only accepts HTTP connections.
  - 443: This port only accepts HTTPS connections.
  - 1024–66535 (inclusive): These ports accept HTTP or HTTPS connections.
- To be valid, the common name (CN) of the certificate must match the domain name for your endpoint's server, and the certificate must be issued by a Certificate Authority trusted by Java 2 Platform, Standard Edition (J2SE) 5.0 (JDK 1.5).
- If your certificate expires, message delivery will fail.

Warning: To avoid an infinite loop of outbound messages that trigger changes that trigger more outbound messages, the user who updates the objects should **not** have the “Send Outbound Messages” permission.

CHAPTER 17 Data Loading and Integration

In this chapter ...

If you need to load large volumes of data (hundreds of thousands to millions of records), there are a number of factors you must consider. Use the topics in this section to become familiar with issues of choosing an API, client application design, organization configuration, and data loader best practices.

Choosing the Right API

The first decision that you must make is which API to use for your data loading process.

SOAP API

Use SOAP API to create, retrieve, update or delete records, such as accounts, leads, and custom objects. With more than 20 different calls, SOAP API also allows you to maintain passwords, perform searches, and much more. Use SOAP API in any language that supports web services.

REST API

REST API provides a powerful, convenient, and simple REST-based web services interface for interacting with Salesforce. Its advantages include ease of integration and development, and it's an excellent choice of technology for use with mobile applications and web projects. For certain projects, you may want to use REST API with other Salesforce REST APIs. To build UI for creating, reading, updating, and deleting records, including building UI for list views, actions, and dependent picklists, use User Interface API. To build UI for B2B Commerce on Lightning, CMS managed content, Experience Cloud sites, or Chatter, use Connect REST API. If you have many records to process, consider using Bulk API, which is based on REST principles and optimized for large sets of data.

Bulk API

Bulk API is based on REST principles and is optimized for loading or deleting large sets of data. You can use it to query, queryAll, insert, update, upsert, or delete many records asynchronously by submitting batches. Salesforce processes batches in the background.

SOAP API, in contrast, is optimized for real-time client applications that update a few records at a time. You can use SOAP API for processing many records, but when the data sets contain hundreds of thousands of records, SOAP API is less practical. Bulk API is designed to make it simple to process data from a few thousand to millions of records.

Client Application Design

Although the Bulk API is the best choice for loading large numbers of records, you can also use the SOAP-based API. There are many ways you can design your application to improve the speed of data loads:

- **Use persistent connections.** Opening a socket takes time, mostly when opening a socket stems from the SSL/TLS negotiation. Without SSL or TLS, the API request would not be secure. Included in the HTTP 1.1 specification is support for reusing sockets among requests (persistent connections) instead of having to re-open a socket per request as in HTTP 1.0. Whether your client supports persistent connections depends on the SOAP stack you are using. By default, .NET uses persistent connections. If you change the configuration to use the Apache http-commons libraries, your client will be compliant with the HTTP 1.1 specification and use persistent connections.

  For information about HTTP 1.1, see HTTP Persistent Connections and `http://www.w3.org/Protocols/rfc2616/rfc2616-sec8.html#sec8.1`.

- **Minimize the number of requests.** There is some processing associated with each request, so to save time your client should batch as many records per request as possible. Set `batchSize` to the limit of 2,000. If that is not the most efficient batch size, the API will change it. For more information about setting batch sizes, see QueryOptions.
- **Minimize the size of the requests.** Your client application should send as many records per request as possible, but it should also send as small a request as possible to reduce network transmission time. To minimize the request size, use compression on both the request and the response. Gzip is the most popular type of compression, and there are multiple posts on the community boards

at the Lightning Platform Developer Boards that describe how to implement compression with different SOAP stacks. The full Gzip analysis and discussion is available at Simon Fell's blog: `http://www.pocketsoap.com/weblog/2005/12/1583.html`.

- **Do Not Design a Multi-Threaded Client Application.** Multi-threading is not allowed for a single client application using the SOAP-based API.

Salesforce Settings

Most processing takes place in the database. Setting these parameters correctly will help the database process as quickly as possible:

- **Enable or Disable the Most Recently Used (MRU) functionality.** Records marked as most recently used (MRU) are listed in the "Recent Items" section of the sidebar in the Salesforce user interface. Check that you are not enabling it for calls where it is not needed.

  In API version 7.0 and above, MRU functionality is disabled by default. To enable the MRU functionality, create this header and set the `updateMru` to `true`. The following sample shows how to use MRU functionality:

```
public void mruHeaderSample() {
  connection.setMruHeader(true);
  Account account = new Account();
  account.setName("This will be in the MRU");
  try {
    SaveResult[] sr = connection.create(new SObject[]{account});
    System.out.println("ID of account added to MRU: " +
      sr[0].getId());
  } catch (ConnectionException ce) {
    ce.printStackTrace();
  }
}
```

- **Log in as a user with the "Modify All Data" permission to avoid sharing rules.** If the client application logs in as a user who has access to data via a sharing rule, then the API must issue an extra query to check access. To avoid this, log in as a user with the "Modify All Data" permission. In general, fewer sharing rules quickens load speeds, as there are fewer operations that have to be performed when setting properties such as ownership.

  Alternatively, you can set organization-wide defaults for some objects as public read/write for the duration of the load. For more information, see "Set Your Internal Organization-Wide Sharing Defaults" in the Salesforce online help.

- **Avoid workflow or assignment rules.** Anything that causes a post-operation action slows down the load. You can temporarily disable automatic rules if the loaded objects are exempt from them.
- **Avoid triggering cascading updates.** For example, if you update the owner of an account, the contacts and opportunities associated with that account may also require updates. Instead of updating a single object, the client application must access multiple objects, which slows down the load.

The Lightning Platform Data Loader is a good reference for data loading. It disables the MRU, uses HTTP/1.1 persistent connections, and applies GZIP compression on the request and response. If you are performing a data load, or are looking at a place to start when writing your own Java integration, the Lightning Platform Data Loader can serve as a fast and reliable solution. For more information about the Lightning Platform Data Loader, see: Data Loader in the Salesforce online help.

Best Practices with Any Data Loader

While this section presents a best practice process using the Lightning Platform Data Loader, the general principles apply to any client data loader:

1. Identify which data you will migrate.

   You may not want or need to migrate a whole set of data—choose which objects you wish to migrate. For example, you may want to migrate only the contact information from each account, or only migrate account information from a particular division.

2. Create templates for the data.

   Create one template for each object, for example in an Excel worksheet.

   Identify the required fields for each object. In addition to the required fields for each standard object, there may be additional required fields such as those needed to follow business rules, or legacy ID fields. Use this guide or see the page layout definitions in the Salesforce user interface to find out which fields are required on standard objects.

   You may wish to highlight the required fields in red for easier review of the data after you populate the templates.

   You should also identify any ordering dependencies. Objects may have mandatory relationships, for example all accounts have an owner, and all opportunities are associated with an account. The dependencies in these relationships dictate the order of data migration. For Salesforce data, for example, you should load users first, then accounts, then opportunities.

   To identify dependencies, review the related lists and lookup fields in the page layout of the given object, and IDs (foreign keys) in the database.

3. Populate the templates.

   Clean your data before populating the template, and review the data in the templates.

4. Migrate the data.

   Create custom fields to store legacy ID information. Optionally, give the custom field the `External ID` attribute so it will be indexed. This will help maintain relationships, and help you build custom reports for validation.

   Load one record, check the results, then load all records.

5. Validate the data.

   Use all of these techniques to validate your migration:

   - Create custom reports that validate record counts and provide an overall snapshot of migration.
   - Spot check the data.
   - Review exception reports to see what data was not migrated.

6. Re-migrate or update data as needed.

Integration and Single Sign-On

Warning: To avoid getting into an unrecoverable state, do not enable single sign-on for your system administrator account. If you do, and then perform a single sign-on integration that fails, you may not be able to log in again to recover.

CHAPTER 18 Data Replication

In this chapter ...

The API supports data replication, which allows you to store and maintain an external, separate copy of your organization's pertinent Salesforce data for specialized uses, such as data warehousing, data mining, custom reporting, analytics, and integration with other applications. Data replication provides you with local control and the ability to run large or ad hoc analytical queries across the entire data set without transmitting all that data across the network.

> **Note:** To get real-time notifications of Salesforce record changes, use Change Data Capture instead. By subscribing to a Change Data Capture channel, you receive a stream of change event messages for record changes, including insertions, updates, deletions, and undeletions. With Change Data Capture, you get broad access to data and can perform updates in your target store using transaction boundaries. Change Data Capture provides a versioned event schema and retains change events temporarily for later retrieval. For more information, see the Change Data Capture Basics Trailhead module, or for a complete reference, see the Change Data Capture Developer Guide.

Use the topics in this section to better understand the best practices for data replication.

API Calls for Data Replication

The API supports data replication with the following API calls:

API Call	Description
`getUpdated()`	Retrieves the list of objects that have been updated (added or changed) during the specified timespan for the specified object.
`getDeleted()`	Retrieves the list of objects that have been deleted during the specified timespan for the specified object.

Client applications can invoke these API calls to determine which objects in your organization's data have been updated or deleted during a given time period. These API calls return a set of IDs for objects that have been updated (added or changed) or deleted, as well as the timestamp (Coordinated Universal Time (UTC)—not local—timezone) indicating when they were last updated or deleted. It is the responsibility of the client application to process these results and to incorporate the required changes into the local copy of the data.

Scope of Data Replication

This feature provides a mechanism that targets data replication (one-way copying of data). It does not provide data synchronization (two-way copying of data) or data mirroring capabilities.

Data Replication Steps

The following is a typical data replication procedure for an object:

1. Optionally, determine whether the structure of the object has changed since the last replication request, as described in Checking for Structural Changes in the Object.
2. Call `getUpdated()`, passing in the object and timespan for which to retrieve data.

   Note that `getUpdated()` retrieves the IDs for data to which the logged in user has access. Data that is outside of the user's sharing model is not returned. The API returns the ID of every changed object that is visible to you, regardless of what change occurred in the object. For information on IDs, see ID Field Type.
3. Pass in all IDs in an array. For each ID element in the array, call `retrieve()` to obtain the latest information you want from the associated object. You must then take the appropriate action on the local data, such as inserting new rows or updating existing ones with the latest information.
4. Call `getDeleted()`, passing in the object and timespan for which to retrieve data. Like `getUpdated()`, `getDeleted()` retrieves the IDs for data to which the logged-in user has access. Data that is outside of the user's sharing model is not returned. The API returns the ID of every changed object that is visible to you, regardless of what change occurred in the object, based on `SystemModstamp` field information if available. For information on IDs, see ID Field Type.
5. Iterate through the returned array of IDs. Your client application must then take the appropriate action on the local data to remove (or flag as deleted) the deleted objects. If your client application cannot match rows in the local data using the retrieved object ID, then the local data rows either were deleted or were never created, in which case there is nothing to do.
6. Optionally, save the request time spans for future reference. You can do this with the `getDeleted()` latestDateCovered value or the `getUpdated()` latestDateCovered value.

Object-Specific Requirements for Data Replication

The API objects have the following requirements for data replication:

- The `getUpdated()` and `getDeleted()` calls filter the results so that the client application receives IDs for only those created or updated objects to which the logged-in user has access. For information on IDs, see ID Field Type.
- Your client application can replicate any objects to which it has sufficient permissions. For example, to replicate all data for your organization, your client application must be logged in with the "View All Data" permission. For more information, see Factors that Affect Data Access.
- The logged-in user must have read access to the object. For more information, see "Set Your Internal Organization-Wide Sharing Defaults" in the Salesforce online help.
- The object must be configured to be replicateable (`replicateable` is `true`). To determine whether a given object can be replicated, your application can invoke the `describeSObject()` call on the object and inspect the `replicateable` property in the describeSObjectResult.

Polling for Changes

Client applications typically poll for changed data periodically. Polling involves the following considerations:

- The polling frequency depends on business requirements for how quickly changes in your organization's Salesforce data need to be reflected in the local copy. Some client applications might poll once a day to retrieve changes, while other client applications might poll every five minutes to achieve closer accuracy.
- Deleted records are written to a delete log, which `getDeleted()` accesses. A background process that runs every two hours purges records that have been in an organization's delete log for more than two hours if the number of records is above a certain limit. Starting with the oldest records, the process purges delete log entries until the delete log is back below the limit. This is done to protect Salesforce from performance issues related to massive delete logs. The limit is calculated using this formula:

  ```
  5000 * number of licenses in the organization
  ```

  For example, an organization with 1,000 licenses could have up to 5,000,000 (five million) records in the delete log before any purging took place. If purging has been performed before your `getDeleted()` call is executed, an `INVALID_REPLICATION_DATE` error is returned. If you get this exception, you should do a full pull of the table.

- The API truncates the seconds portion of dateTime values. For example, if a client application submits a timespan between 12:30:15 and 12:35:15 (Coordinated Universal Time (UTC) time), then the API retrieves information about items that have changed between 12:30:00 and 12:35:00 (UTC), inclusive.

  Note: Development tools differ in the way that they handle time data. Some development tools report the local time, while others report only the Coordinated Universal Time (UTC) time. To determine how your development tool handles time values, refer to its documentation.

- We recommend polling no more frequently than every five minutes. There are built in controls to prevent errant applications from invoking the data replication API calls too frequently.
- Client applications should save the timespan used in previous data replication API calls so that the application knows the last time period for which data replication was successfully completed.
- To ensure data integrity on the local copy of the data, a client application needs to capture all of the relevant changes during polling—even if it requires processing data redundantly to ensure that there are no gaps. Your client application can contain business logic to skip processing objects that have already been integrated into your local data.

- Gaps can also occur if the client application somehow fails to poll the data as expected (for example, due to a hardware crash or network connection failure). Your client application can contain business logic that determines the last successful replication and polls for the next consecutive timespan.
- If for any reason the local data is compromised, your client application might also provide business logic for rebuilding the local data from scratch.

Note: You can now use Outbound Messaging to trigger actions instead of polling for them.

Checking for Structural Changes in the Object

In the API, data replication only reflects changes made to object records. It does not determine whether changes have been made to the structure of objects (for example, fields added to—or removed from—a custom object). It is the responsibility of the client application to check whether the structure of a given object has changed since the last update. Before replicating data, client applications can call `describeSObjects()` on the object, and then compare the data returned in the DescribeSObjectResult with the data returned and saved from previous `describeSObjects()` invocations.

CHAPTER 19 Feature-Specific Considerations

In this chapter ...

Some Salesforce features require special consideration when accessed via the API. Use the topics in this section to learn about the special considerations for activities, person accounts, forecast override business rules, the Call Center, and creating your own apps.

Archived Activities

Salesforce archives activities (tasks and events) that are over a year old.

You can use `queryAll()` to query on all Task and Event records, archived or not. You can also filter on the `isArchived` field to find only the archived objects. You cannot use `query()` as it automatically filters out all records where `isArchived` is set to `true`. You can update or delete archived records, though you cannot update the `isArchived` field. If you use the API to insert activities that meet the criteria listed below, the activities will be archived during the next run of the archival background process.

Older Events and Tasks are archived according to the criteria listed below. In the Salesforce user interface, users can view archived activities in several locations.

- Click **View All** in the Activity History related list to open the Activity History tab. In the Activity History tab, you can sort entries and open, edit, or delete activities.
- Click **View All** in the activity timeline to open the All Activity History list. Up to 2,000 records appear, including archived records. The All Activity History list is ideal for printing.

In the API, archived activities can only be queried via `queryAll()`.

Activity archive criteria:

- Events with an `ActivityDateTime` or `ActivityDate` value greater than or equal to 365 days old
- Tasks with an `IsClosed` value of `true` and an `ActivityDate` value greater than or equal to 365 days old
- Tasks with an `IsClosed` value of `true`, a blank `ActivityDate` field, and a create date greater than or equal to 365 days ago

  For more information, see View Archived Activities in Salesforce Help.

Person Account Record Types

Beginning with API version 8.0, a new family of record types on Account objects is available: “person account” record types. The person account record types enable specialized business-to-consumer functionality for users who sell to or do business with individuals. For example, a doctor, hairdresser, or real estate agent whose clients are individuals. For more information about person accounts, see “Person Accounts” and “Considerations for Using Person Accounts” in the Salesforce Help.

Record types are person account record types if the Account field `IsPersonAccount` is set to `true`. Salesforce provides one default person account record type, PersonAccount, but an administrator can create additional person account record types. Conversely, record types with the Account field `IsPersonAccount` set to `false` are “business account” record types, which are traditional business-to-business (B2B) Salesforce accounts.

When a person account is created (or an existing business account is changed to a person account), a corresponding contact record is also created. This contact record is referred to as a “person contact.” The person contact enables the person account to function simultaneously as both an account and a contact. This record is the only contact record that can be associated directly with the person account. Also, the ID of the corresponding person contact record is stored in the `PersonContactId` field on the person account.

Review this list of facts about person account record types before working with them.

- Contact your account representative to enable the person account feature, if the feature isn’t enable yet.
- You can use a query similar to the following example to find all records with a person account record type:

```
SELECT Name, SobjectType,IsPersonType
FROM RecordType
WHERE SobjectType='Account' AND IsPersonType=True
```

- If you issue a `query()` call against an account, the results return the root object type in the `SojbectType` field. The returned value is always Account.
- A person contact can be modified, but cannot be created or deleted. Since these kinds of contacts do not have their own record detail page, clients must redirect users to the corresponding person account (Account) page. SOSL results don't include any of the contact fields enabled when `IsPersonAccount` is set to `true`. The contact `ReportsToId` field is not visible.
- If you delete the account, the contact is also deleted. You cannot directly delete the contact; you must delete the account.
- You can change the record type of an account across record type families (typically performed when migrating business accounts to person accounts, but the reverse operation is also supported). When you change the record type from a business account to a person account, the person contact is created. When you change the record type from a person account to a business account, the person fields are set to null, and the person contact becomes a regular contact with the same parent account it had before the change.

  Note: You cannot change record types across record type families in the Salesforce user interface.

- If you change the record type of a business account to a person account using either `update()` or `upsert()`, you cannot make any other changes to fields in that account in the same call; if attempted, the fault `INVALID_FIELD_FOR_INSERT_UPDATE` results. However, you can change record type values from one person account record type to another, or from one business account record type to another, in the same call with other changes.
- When converting a business account to a person account, there must be a one-to-one relationship between each business account record and its corresponding contact record. Furthermore, fields common to both records such as `Owner` and `Currency` must have identical values.
- Workflow and validation formulas do not fire during a change in record types from or to person accounts.
- When you change a business account to a person account, valid records are changed and invalid records show an error in the results array.
- When you change a person account to a business account, no validation is performed.
- `describeLayout()` for version 7.0 and below returns the default business account record type as the default record type even if the tab default is a person account record type. In version 8.0 and after, it will always be the tab default.
- `describeLayout()` for version 7.0 and below doesn't return any person account record types.
- `describeSObject()` for version 7.0 and below show Account objects as not creatable if the profile does not have access to any business record types.
- After conversion, the new person accounts will have unique one-to-one relationships with the contact records that formed them. As is true for all person accounts, no other contacts can be associated to a person account.
- After conversion, any existing account field history information remains on the person accounts. Any existing contact field history information is retained on the contact, but is not added to the person accounts field history.

For more information about person accounts, see the Salesforce Help.

External Objects

Special behaviors and limitations apply to `queryAll()` and `queryMore()` calls on external data.

queryAll()

Because Salesforce doesn't track changes to external data, `queryAll()` behaves the same as `query()` for external objects.

queryMore()

It's common for Salesforce Connect queries of external data to have a large result set that's broken into smaller batches or pages. When querying external objects, Salesforce Connect accesses the external data in real time via Web service callouts. Each `queryMore()` call results in a Web service callout. The batch boundaries and page sizes depend on your adapter and how you set up the external data source.

We recommend the following:

- When possible, avoid paging by filtering your queries of external objects to return fewer rows than the batch size, which by default is 500 rows. Remember, obtaining each batch requires a `queryMore()` call, which results in a Web service callout.
- If the external data frequently changes, avoid using `queryMore()` calls. If the external data is modified between `queryMore()` calls, you can get an unexpected `QueryResult`.

If the primary or "driving" object for a `SELECT` statement is an external object, `queryMore()` supports only that primary object and doesn't support subqueries.

By default, the OData 2.0 and 4.0 adapters for Salesforce Connect use client-driven paging. With client-driven paging, OData adapters convert each `queryMore()` call into an OData query that uses the `$skip` and `$top` system query options to specify the batch boundary and page size. These options are similar to using `LIMIT` and `OFFSET` clauses to page through a result set.

If you enable server-driven paging on an external data source, Salesforce ignores the requested page sizes, including the default `queryMore()` batch size of 500 rows. The pages returned by the external system determine the batches, but each page can't exceed 2,000 rows.

Call Centers and the API

The API provides access to information about computer–telephony integration (CTI) call centers with the `describeSoftphoneLayout()` call. You must have the CTI feature enabled for your organization. Contact your account representative for assistance.

The API supports limited access to call center-related objects, including being able to create call centers, and create or modify additional numbers for the call center.

Topic	Description
CallCenter	Call Center object description, including fields and usage.
AdditionalNumber	Configuration settings that allow you to add an additional number if it cannot easily be categorized as a user, contact, lead, account, or any other object. Examples include phone queues or conference rooms.

In addition, several fields have been added to existing objects to support call centers. The following fields provide configuration settings for operation of a call center.

Object Name	Field Name	Field Type	Field Properties	Description
OpenActivity ActivityHistory Task	`CallDisposition`	string	Create (Task only) Filter	Represents the result of a given call, for example, "we'll call back," or "call unsuccessful." Limit is 255 characters.

Object Name	Field Name	Field Type	Field Properties	Description
			Nillable Update (Task only)	For the Task object, corresponds to the Salesforce user interface label **Call Result**. You can also create and update values for this field in Task.
OpenActivity ActivityHistory Task	`CallDurationInSeconds`	int	Create (Task only) Filter Nillable Update (Task only)	Duration of the call in seconds. For Task, you can also create and update values for this field.
OpenActivity ActivityHistory Task	`CallObject`	string	Filter Nillable Update (Task only)	Name of a call center. Limit is 255 characters. For Task, you can also create and update values for this field.
OpenActivity ActivityHistory Task	`CallType`	picklist	Create (Task only) Filter Nillable Restricted picklist Update	The type of call being answered: Inbound, Internal, or Outbound. For Task, you can also create and update values for this field.
User	`CallCenterId`	reference	Create Filter Nillable Update	The unique identifier for the call center associated with this user.
User	`UserPermissionsCallCenterAutoLogin`	boolean	Create Update	Indicates whether a user will be automatically logged in to a call center when logging in to the Salesforce application (`true`) or not (`false`).

Implementing Salesforce Integrations on Lightning Platform

You can implement your Salesforce integrations or other client applications, on the Lightning Platform by creating a Salesforce AppExchange app.

1. Create a WebLink that passes the user session ID and the API server URL to an external site:

```
https://www.your_tool.com/test.jsp?sessionid={!API_Session_ID}&url={!API_Partner_Server_URL_80}
```

   Use `https` to ensure that your session ID cannot be detected.

2. The page pointed to in the preceding step takes the session ID and uses it to call back to the API. Use `getUserInfo()` to return the `userID` associated with the session and related information. If needed, you can also use retrieve on the User object to retrieve any additional information you need about the user.
3. Maintain a cross-reference between the `UserId` or username and the corresponding user ID in your system, which you can do using a WebLink that is executed when the user clicks a tab, or a WebLink on the page layout.
4. Package and upload this app using the instructions in Salesforce Help topic “Prepare Your Apps for Distribution.”

Accessing Salesforce Data Using the API and OAuth

Salesforce supports OAuth 1.0.A and 2.0 for SOAP API requests.

Using an already defined connected app and the OAuth protocol, a third party can implement an OAuth authentication flow to integrate with the Salesforce API.

For detailed steps about integrating with the Salesforce API using OAuth, see Authenticating Apps with OAuth in Salesforce Help.

Partners, who wish to get an OAuth consumer Id for authentication, can contact Salesforce

Knowledge

Articles Overview

Articles capture information about your company's products and services that you want to make available in your knowledge base. Articles in the knowledge base can be classified using data categories to make it easy for users to find the articles they need. Administrators can use data categories to control access to articles.

Knowledge Articles vs. Knowledge Article Versions

When working with articles, keep in mind that the KnowledgeArticle on page 1652 represents the parent record of all article versions. KnowledgeArticleVersion records represent each version of a given article.

Record Types vs. Article Types

The article structure is represented differently between Lightning Experience and Salesforce Classic. In Lightning Knowledge, you use the same record types available in other custom objects (see the `RecordTypeId` field on Knowledge__kav) to structure different types of articles. For example, you can use different layouts for different record types. In Salesforce Classic, you get this functionality through article types (see the `ArticleType` field on KnowledgeArticleVersion). Each unique type of article has a unique object in Salesforce Classic (for example, FAQ__kav for FAQ article types). Lightning Knowledge does not have a unique object for each type because it is handled using the record type.

Audience Channel

An audience, sometimes called a channel, refers to the types of users who can access an article. Salesforce Knowledge offers four channels where you can make articles available.

- Internal App: Salesforce users can access articles depending on their role visibility.
- Customer: Customers can access articles in a community, site, or customer portal. Customer users inherit the role visibility of the manager on the account. In a community, the article is only available to users with Customer Community or Customer Community Plus licenses.
- Partner: Partners can access articles in a community, site, or partner portal. Partner users inherit the role visibility of the manager on the account. In a community, the article is only available to users with Partner Community licenses.
- Public Knowledge Base: Articles can be made available to anonymous users by creating a public knowledge base. With Lightning Knowledge, most Salesforce orgs use Communities to create a knowledge base. Creating a public knowledge base for Salesforce Knowledge in Salesforce Classic requires Sites and Visualforce.

Publishing Cycle

Salesforce Knowledge Articles move through a publishing cycle from their creation to their deletion. The publishing cycle includes three different statuses: `Draft` is the stage when a new article is being created or an existing one is being updated. Articles with the `Online` status are draft articles that have been published and are now available to their different channels. Eventually, when a published article is at the end of its life, it can be moved to the `Archived` status or sent back to `Draft` to be updated in a subsequent version.

Working with Articles in the API

Articles are available through the KnowledgeArticleVersion and KnowledgeArticle objects in the API. They both represent an article but provide different capabilities.

KnowledgeArticleVersion

Every new draft article in Salesforce Knowledge has a version number. When an article is published and you want to update it, you can create a new `Draft` with a distinct version number. Each version has its own ID. Once the updated version is ready to be published, it replaces the former one and updates the version number. You can access the content of an article version using the KnowledgeArticleVersion object and filter on its Draft or Online status. For example, the following query returns the title of the Draft version of all the articles across all article types in United States English:

```
SELECT Title
FROM KnowledgeArticleVersion
WHERE PublishStatus='Draft'
AND language ='en_US'
```

Articles are also auto-assigned an Article Number, which is not a unique identifier to an individual article, but an identifier to a master article and all of its available translations.

Note: Both the master version (the knowledge article with IsMasterLanguage = 1) and the translations are KnowledgeArticleVersion objects.

KnowledgeArticle

Unlike KnowledgeArticleVersion, the ID of a KnowledgeArticle record is identical irrespective of the article's version (status). Where the KnowledgeArticleVersion object provides API access to an article's custom field values, the KnowledgeArticle object provides API access to an article's metadata fields.

The article record is the parent container of all versions of an article, whatever the publishing status (draft, published, archived) and the language. While KnowledgeArticle and KnowledgeArticleVersion represent any article in the knowledge base, use the concrete representation of these objects for the specific articles. In Lightning Knowledge, these concrete representations default to Knowledge__ka (for the Knowledge article) and Knowledge__kav (for the Knowledge article version). In Salesforce Classic, use <Article Type>__ka and <Article Type>__kav.

The following Lightning Knowledge query returns the title for all the published FAQ articles in United States English:

```
SELECT Title
FROM Knowledge__kav
WHERE PublishStatus='online'
AND Language = 'en_US'
AND RecordTypeId = '<specify RecordTypeId for FAQ here>'
```

The following Salesforce Classic query returns the title for all the published offers in United States English:

```
SELECT Title
FROM FAQ__kav
WHERE PublishStatus='online'
AND language ='en_US'
```

Data Categories Overview

Data categories are organized by category group and let:

- Users classify and find records.
- Administrators control access to records.

Salesforce Knowledge uses data categories to classify articles and make them easier to find. For example, to classify articles by sales regions and products, create two category groups: Sales Regions, Products. The Sales Regions category group could consist of a geographical hierarchy, such as All Sales Regions as the top level and North America, Europe, and Asia at the second level. The Products group could have All Products as the top level and Phones, Computers, and Printers at the second.

Working with Data Categories in the API

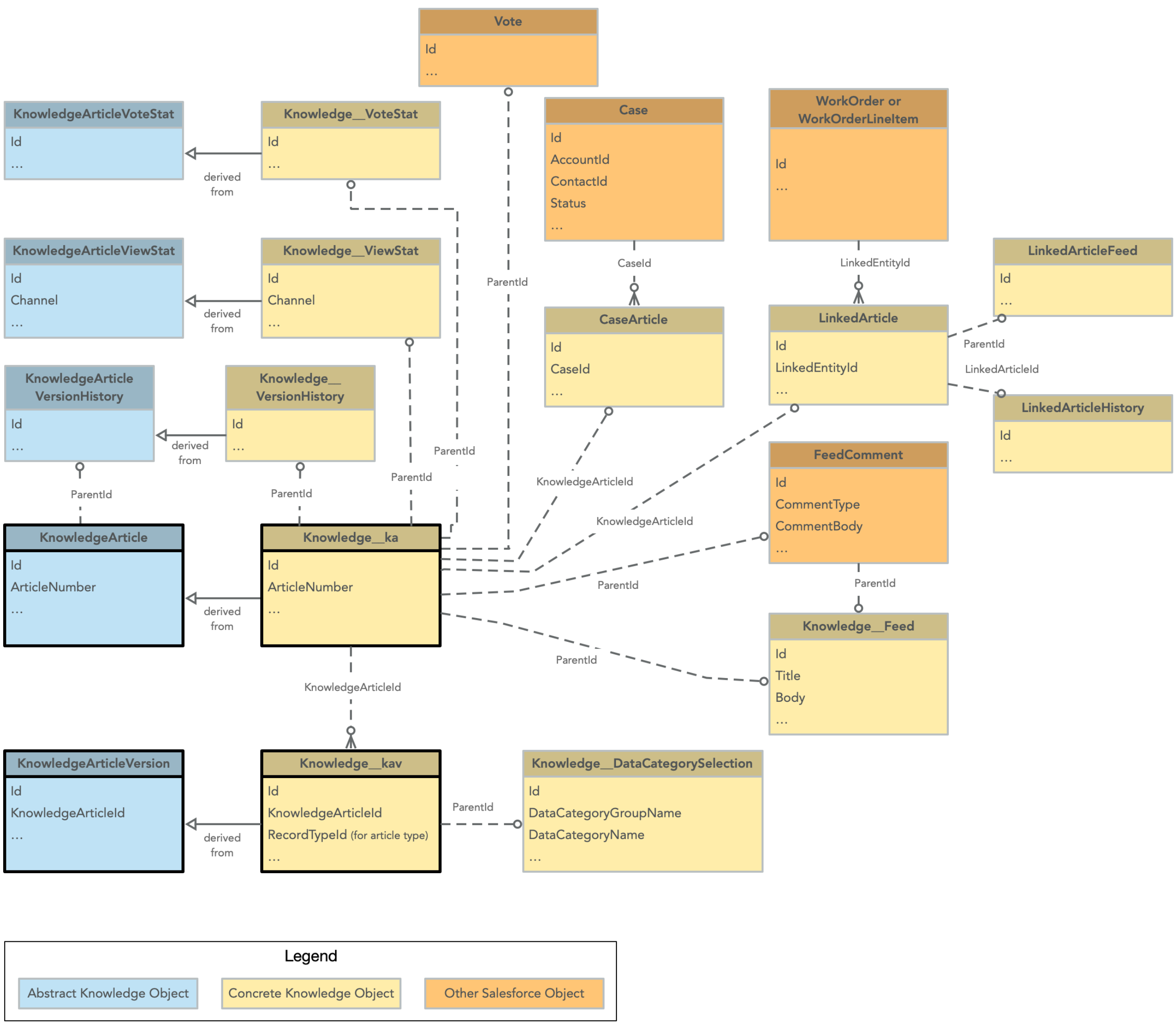
The following table lists API resources for working with data categories.

Name	Type	Description
Knowledge__DataCategorySelection	Object	Gives access to article categorization in Lightning Knowledge.
Article Type__DataCategorySelection	Object	Gives access to article categorization in Knowledge for Salesforce Classic.
QuestionDataCategorySelection	Object	Gives access to question categorization.
WITH DATA CATEGORY ***filteringExpression***	SOQL clause	Filters articles depending on their status in the publishing cycle and their data categories. For more information, see the *Salesforce SOQL and SOSL Reference Guide*.
WITH DATA CATEGORY ***DataCategorySpec***	SOSL clause	Finds articles based on their categorization. For more information, see the *Salesforce SOQL and SOSL Reference Guide*.
describeDataCategoryGroups()	Call	Retrieves available category groups for objects specified in the request.
describeDataCategoryGroupStructures()	Call	Retrieves available category groups along with their data category structure for objects specified in the request.

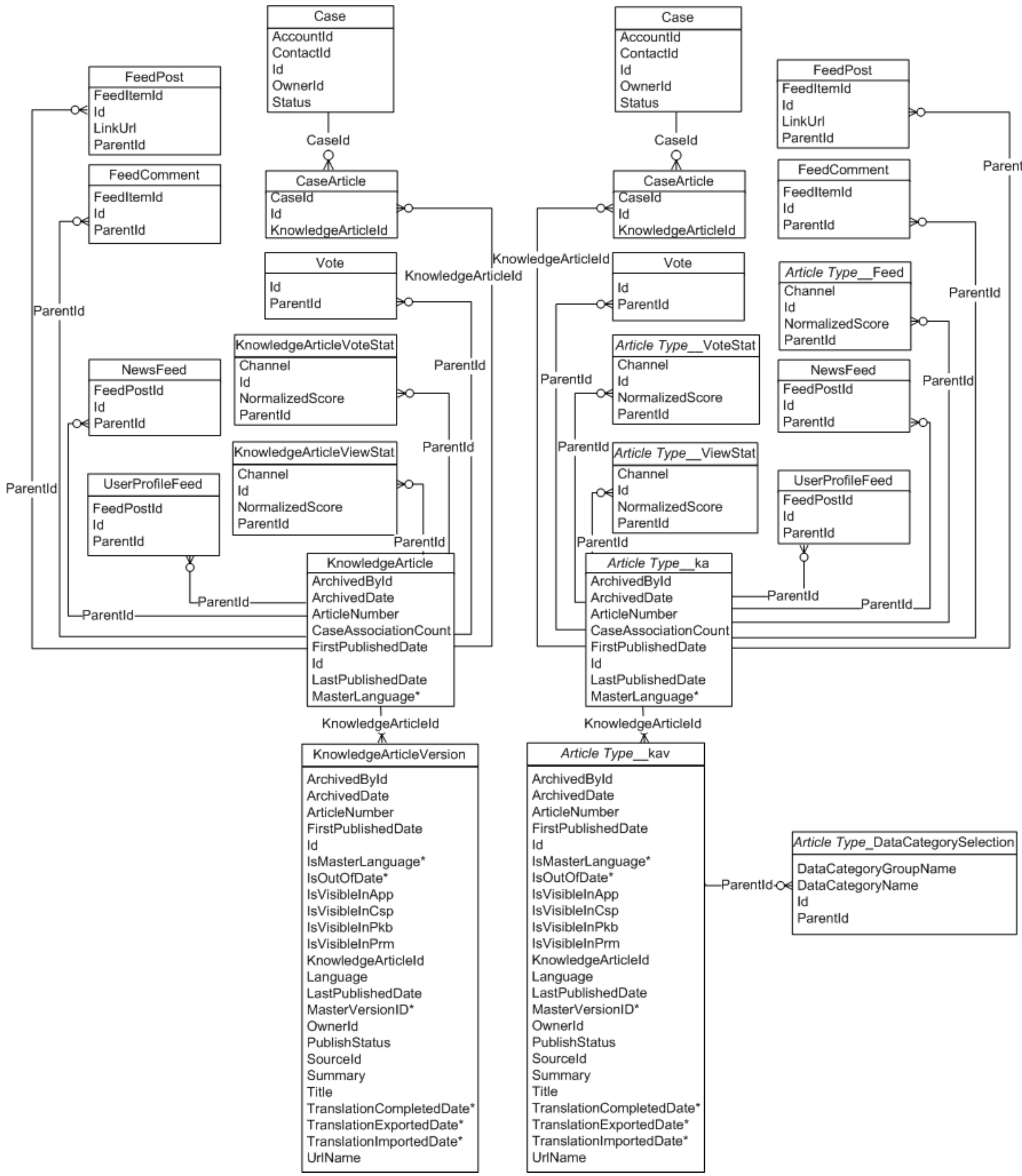
Name	Type	Description
`describeDataCategoryGroups`	Apex method	Returns a list of the category groups associated with the specified objects. See the *Apex Developer Guide*.
`describeDataCategoryGroupStructures`	Apex method	Returns available category groups along with their data category structure for objects specified in the request. See the *Apex Developer Guide*.

Salesforce Knowledge Objects

This entity relationship diagram (ERD) illustrates relationships between the Salesforce Knowledge objects in Lightning Knowledge.



This ERD illustrates the relationship between objects in Salesforce Classic.



Additional Information

To learn more about managing your knowledge base using the API, see the Knowledge Developer Guide.

GLOSSARY

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z

A

AJAX Toolkit

A JavaScript wrapper around the API that allows you to execute any API call and access any object you have permission to view from within JavaScript code. For more information, see the *AJAX Toolkit Developer's Guide*.

Anonymous Block, Apex

Apex code that does not get stored in Salesforce, but that can be compiled and executed by using the `ExecuteAnonymousResult()` API call, or the equivalent in the AJAX Toolkit.

Anti-Join

An anti-join is a subquery on another object in a `NOT IN` clause in a SOQL query. You can use anti-joins to create advanced queries. See also Semi-Join.

Apex

Apex is a strongly typed, object-oriented programming language that allows developers to execute flow and transaction control statements on the Lightning platform server in conjunction with calls to the Lightning Platform API. Using syntax that looks like Java and acts like database stored procedures, Apex enables developers to add business logic to most system events, including button clicks, related record updates, and Visualforce pages. Apex code can be initiated by Web service requests and from triggers on objects.

Apex-Managed Sharing

Enables developers to programmatically manipulate sharing to support their application's behavior. Apex-managed sharing is only available for custom objects.

App

Short for "application." A collection of components such as tabs, reports, dashboards, and Visualforce pages that address a specific business need. Salesforce provides standard apps such as Sales and Service. You can customize the standard apps to match the way you work. In addition, you can package an app and upload it to the AppExchange along with related components such as custom fields, custom tabs, and custom objects. Then, you can make the app available to other Salesforce users from the AppExchange.

AppExchange

The AppExchange is a sharing interface from Salesforce that allows you to browse and share apps and services for the Lightning Platform.

AppExchange Upgrades

Upgrading an app is the process of installing a newer version.

Application Programming Interface (API)

The interface that a computer system, library, or application provides to allow other computer programs to request services from it and exchange data.

B

Boolean Operators

You can use Boolean operators in report filters to specify the logical relationship between two values. For example, the AND operator between two values yields search results that include both values. Likewise, the OR operator between two values yields search results that include either value.

Bulk API

The REST-based Bulk API is optimized for processing large sets of data. It allows you to query, insert, update, upsert, or delete a large number of records asynchronously by submitting a number of batches which are processed in the background by Salesforce. See also SOAP API.

C

Callout, Apex

An Apex callout enables you to tightly integrate your Apex with an external service by making a call to an external Web service or sending a HTTP request from Apex code and then receiving the response.

Child Relationship

A relationship that has been defined on an sObject that references another sObject as the "one" side of a one-to-many relationship. For example, contacts, opportunities, and tasks have child relationships with accounts.

See also sObject.

Class, Apex

A template or blueprint from which Apex objects are created. Classes consist of other classes, user-defined methods, variables, exception types, and static initialization code. In most cases, Apex classes are modeled on their counterparts in Java.

Client App

An app that runs outside the Salesforce user interface and uses only the Lightning Platform API or Bulk API. It typically runs on a desktop or mobile device. These apps treat the platform as a data source, using the development model of whatever tool and platform for which they are designed.

Component, Visualforce

Something that can be added to a Visualforce page with a set of tags, for example, `<apex:detail>`. Visualforce includes a number of standard components, or you can create your own custom components.

Component Reference, Visualforce

A description of the standard and custom Visualforce components that are available in your organization. You can access the component library from the development footer of any Visualforce page or the *Visualforce Developer's Guide*.

Controller, Visualforce

An Apex class that provides a Visualforce page with the data and business logic it needs to run. Visualforce pages can use the standard controllers that come by default with every standard or custom object, or they can use custom controllers.

Controlling Field

Any standard or custom picklist or checkbox field whose values control the available values in one or more corresponding dependent fields.

Custom App

See App.

Custom Field

A field that can be added in addition to the standard fields to customize Salesforce for your organization's needs.

Custom Help

Custom text administrators create to provide users with on-screen information specific to a standard field, custom field, or custom object.

Custom Links

Custom links are URLs defined by administrators to integrate your Salesforce data with external websites and back-office systems. Formerly known as Web links.

Custom Object

Custom records that allow you to store information unique to your organization.

Custom S-Control

> Note: S-controls have been superseded by Visualforce pages. After March 2010 organizations that have never created s-controls, as well as new organizations, won't be allowed to create them. Existing s-controls will remain unaffected, and can still be edited.

Custom Web content for use in custom links. Custom s-controls can contain any type of content that you can display in a browser, for example a Java applet, an Active-X control, an Excel file, or a custom HTML Web form.

D

Database

An organized collection of information. The underlying architecture of the Lightning Platform includes a database where your data is stored.

Database Table

A list of information, presented with rows and columns, about the person, thing, or concept you want to track. See also Object.

Data Loader

A Lightning Platform tool used to import and export data from your Salesforce organization.

Data Manipulation Language (DML)

An Apex method or operation that inserts, updates, or deletes records.

Date Literal

A keyword in a SOQL or SOSL query that represents a relative range of time such as `last month` or `next year`.

Decimal Places

Parameter for number, currency, and percent custom fields that indicates the total number of digits you can enter to the right of a decimal point, for example, 4.98 for an entry of 2. Note that the system rounds the decimal numbers you enter, if necessary. For example, if you enter 4.986 in a field with `Decimal Places` of 2, the number rounds to 4.99. Salesforce uses the round half-up rounding algorithm. Half-way values are always rounded up. For example, 1.45 is rounded to 1.5. –1.45 is rounded to –1.5.

Delegated Authentication

A security process where an external authority is used to authenticate Lightning Platform users.

Dependent Field

Any custom picklist or multi-select picklist field that displays available values based on the value selected in its corresponding controlling field.

Developer Edition

A free, fully-functional Salesforce organization designed for developers to extend, integrate, and develop with the Lightning Platform. Developer Edition accounts are available on developer.salesforce.com.

Salesforce Developers

The Salesforce Developers website at developer.salesforce.com provides a full range of resources for platform developers, including sample code, toolkits, an online developer community, and the ability to obtain limited Lightning Platform environments.

Document Library

A place to store documents without attaching them to accounts, contacts, opportunities, or other records.

E

Email Alert

Email alerts are actions that send emails, using a specified email template, to specified recipients.

Email Template

A form email that communicates a standard message, such as a welcome letter to new employees or an acknowledgment that a customer service request has been received. Email templates can be personalized with merge fields, and can be written in text, HTML, or custom format.

Note: Lightning email templates aren't packageable.

Enterprise Edition

A Salesforce edition designed for larger, more complex businesses.

Enterprise WSDL

A strongly-typed WSDL for customers who want to build an integration with their Salesforce organization only, or for partners who are using tools like Tibco or webMethods to build integrations that require strong typecasting. The downside of the Enterprise WSDL is that it only works with the schema of a single Salesforce organization because it is bound to all of the unique objects and fields that exist in that organization's data model.

Entity Relationship Diagram (ERD)

A data modeling tool that helps you organize your data into entities (or objects, as they are called in the Lightning Platform) and define the relationships between them. ERD diagrams for key Salesforce objects are published in the *SOAP API Developer's Guide*.

F

Field

A part of an object that holds a specific piece of information, such as a text or currency value.

Field-Level Security

Settings that determine whether fields are hidden, visible, read only, or editable for users. Available in Professional, Enterprise, Unlimited, Performance, and Developer Editions.

Filter Condition/Criteria

Condition on particular fields that qualifies items to be included in a list view or report, such as "State equals California."

Foreign Key

A field whose value is the same as the primary key of another table. You can think of a foreign key as a copy of a primary key from another table. A relationship is made between two tables by matching the values of the foreign key in one table with the values of the primary key in another.

Formula Field

A type of custom field. Formula fields automatically calculate their values based on the values of merge fields, expressions, or other values.

Function

Built-in formulas that you can customize with input parameters. For example, the DATE function creates a date field type from a given year, month, and day.

G

Gregorian Year

A calendar based on a 12-month structure used throughout much of the world.

Group Edition

A product designed for small businesses and workgroups with a limited number of users.

H

HTTP Debugger

An application that can be used to identify and inspect SOAP requests that are sent from the AJAX Toolkit. They behave as proxy servers running on your local machine and allow you to inspect and author individual requests.

I

ID

See Salesforce Record ID.

Inline S-Control

> Note: S-controls have been superseded by Visualforce pages. After March 2010 organizations that have never created s-controls, as well as new organizations, won't be allowed to create them. Existing s-controls will remain unaffected, and can still be edited.

An s-control that displays within a record detail page or dashboard, rather than on its own page.

Instance

The cluster of software and hardware represented as a single logical server that hosts an organization's data and runs their applications. The Lightning Platform runs on multiple instances, but data for any single organization is always stored on a single instance.

Integration User

A Salesforce user defined solely for client apps or integrations. Also referred to as the logged-in user in a SOAP API context.

ISO Code

The International Organization for Standardization country code, which represents each country by two letters.

J

Junction Object

A custom object with two master-detail relationships. Using a custom junction object, you can model a “many-to-many” relationship between two objects. For example, you create a custom object called “Bug” that relates to the standard case object such that a bug could be related to multiple cases and a case could also be related to multiple bugs.

K

No Glossary items for this entry.

L

License Management Application (LMA)

A free AppExchange app that allows you to track sales leads and accounts for every user who downloads your managed package (app) from the AppExchange.

License Management Organization (LMO)

The Salesforce organization that you use to track all the Salesforce users who install your package. A license management organization must have the License Management Application (LMA) installed. It automatically receives notification every time your package is installed or uninstalled so that you can easily notify users of upgrades. You can specify any Enterprise, Unlimited, Performance, or Developer Edition organization as your license management organization. For more information, go to http://www.salesforce.com/docs/en/lma/index.htm.

Lightning Platform

The Salesforce platform for building applications in the cloud. Lightning Platform combines a powerful user interface, operating system, and database to allow you to customize and deploy applications in the cloud for your entire enterprise.

List View

A list display of items (for example, accounts or contacts) based on specific criteria. Salesforce provides some predefined views.

In the Agent console, the list view is the top frame that displays a list view of records based on specific criteria. The list views you can select to display in the console are the same list views defined on the tabs of other objects. You cannot create a list view within the console.

Locale

The country or geographic region in which the user is located. The setting affects the format of date and number fields, for example, dates in the English (United States) locale display as 06/30/2000 and as 30/06/2000 in the English (United Kingdom) locale.

In Professional, Enterprise, Unlimited, Performance, and Developer Edition organizations, a user's individual `Locale` setting overrides the organization's `Default Locale` setting. In Personal and Group Editions, the organization-level locale field is called `Locale`, not `Default Locale`.

Logged-in User

In a SOAP API context, the username used to log into Salesforce. Client applications run with the permissions and sharing of the logged-in user. Also referred to as an integration user.

M

Managed Package

A collection of application components that is posted as a unit on the AppExchange and associated with a namespace and possibly a License Management Organization. To support upgrades, a package must be managed. An organization can create a single managed package that can be downloaded and installed by many different organizations. Managed packages differ from unmanaged packages by having some locked components, allowing the managed package to be upgraded later. Unmanaged packages do not include locked components and cannot be upgraded. In addition, managed packages obfuscate certain components (like Apex) on subscribing organizations to protect the intellectual property of the developer.

Manual Sharing
Record-level access rules that allow record owners to give read and edit permissions to other users who might not have access to the record any other way.

Many-to-Many Relationship
A relationship where each side of the relationship can have many children on the other side. Many-to-many relationships are implemented through the use of junction objects.

Master-Detail Relationship
A relationship between two different types of records that associates the records with each other. For example, accounts have a master-detail relationship with opportunities. This type of relationship affects record deletion, security, and makes the lookup relationship field required on the page layout.

Master Picklist
A complete list of picklist values available for a record type or business process.

Metadata
Information about the structure, appearance, and functionality of an organization and any of its parts. Lightning Platform uses XML to describe metadata.

Metadata WSDL
A WSDL for users who want to use the Lightning Platform Metadata API calls.

Multitenancy
An application model where all users and apps share a single, common infrastructure and code base.

N

Namespace
In a packaging context, a one- to 15-character alphanumeric identifier that distinguishes your package and its contents from packages of other developers on AppExchange, similar to a domain name. Salesforce automatically prepends your namespace prefix, followed by two underscores ("__"), to all unique component names in your Salesforce organization.

Native App
An app that is built exclusively with setup (metadata) configuration on Lightning Platform. Native apps do not require any external services or infrastructure.

O

Object
An object allows you to store information in your Salesforce organization. The object is the overall definition of the type of information you are storing. For example, the case object allow you to store information regarding customer inquiries. For each object, your organization will have multiple records that store the information about specific instances of that type of data. For example, you might have a case record to store the information about Joe Smith's training inquiry and another case record to store the information about Mary Johnson's configuration issue.

Object-Level Help
Custom help text that you can provide for any custom object. It displays on custom object record home (overview), detail, and edit pages, as well as list views and related lists.

Object-Level Security
Settings that allow an administrator to hide whole objects from users so that they don't know that type of data exists. Object-level security is specified with object permissions.

onClick JavaScript
JavaScript code that executes when a button or link is clicked.

One-to-Many Relationship
A relationship in which a single object is related to many other objects. For example, an account may have one or more related contacts.

Organization-Wide Defaults
Settings that allow you to specify the baseline level of data access that a user has in your organization. For example, you can set organization-wide defaults so that any user can see any record of a particular object that is enabled via their object permissions, but they need extra permissions to edit one.

Outbound Call
Any call that originates from a user to a number outside of a call center in Salesforce CRM Call Center.

Outbound Message
An outbound message sends information to a designated endpoint, like an external service. Outbound messages are configured from Setup. You must configure the external endpoint and create a listener for the messages using the SOAP API.

Overlay
An overlay displays additional information when you hover your mouse over certain user interface elements. Depending on the overlay, it will close when you move your mouse away, click outside of the overlay, or click a close button.

Owner
Individual user to which a record (for example, a contact or case) is assigned.

P

PaaS
See Platform as a Service.

Package
A group of Lightning Platform components and applications that are made available to other organizations through the AppExchange. You use packages to bundle an app along with any related components so that you can upload them to AppExchange together.

Package Dependency
This is created when one component references another component, permission, or preference that is required for the component to be valid. Components can include but are not limited to:

- Standard or custom fields
- Standard or custom objects
- Visualforce pages
- Apex code

Permissions and preferences can include but are not limited to:

- Divisions
- Multicurrency
- Record types

Package Installation
Installation incorporates the contents of a package into your Salesforce organization. A package on the AppExchange can include an app, a component, or a combination of the two. After you install a package, you may need to deploy components in the package to make it generally available to the users in your organization.

Package Publication
Publishing your package makes it publicly available on the AppExchange.

Package Version
A package version is a number that identifies the set of components uploaded in a package. The version number has the format `majorNumber.minorNumber.patchNumber` (for example, 2.1.3). The major and minor numbers increase to a chosen value during every major release. The `patchNumber` is generated and updated only for a patch release.

Unmanaged packages are not upgradeable, so each package version is simply a set of components for distribution. A package version has more significance for managed packages. Packages can exhibit different behavior for different versions. Publishers can use package versions to evolve the components in their managed packages gracefully by releasing subsequent package versions without breaking existing customer integrations using the package. See also Patch and Patch Development Organization.

Parent Account
An organization or company that an account is affiliated. By specifying a parent for an account, you can get a global view of all parent/subsidiary relationships using the **View Hierarchy** link.

Partner WSDL
A loosely-typed WSDL for customers, partners, and ISVs who want to build an integration or an AppExchange app that can work across multiple Salesforce organizations. With this WSDL, the developer is responsible for marshaling data in the correct object representation, which typically involves editing the XML. However, the developer is also freed from being dependent on any particular data model or Salesforce organization. Contrast this with the Enterprise WSDL, which is strongly typed.

Patch
A patch enables a developer to change the functionality of existing components in a managed package, while ensuring subscribing organizations that there are no visible behavior changes to the package. For example, you can add new variables or change the body of an Apex class, but you may not add, deprecate, or remove any of its methods. Patches are tracked by a `patchNumber` appended to every package version. See also Patch Development Organization and Package Version.

Patch Development Organization
The organization where patch versions are developed, maintained, and uploaded. Patch development organizations are created automatically for a developer organization when they request to create a patch. See also Patch and Package Version.

Personal Edition
Product designed for individual sales representatives and single users.

Personal Information
User information including personal contact information, quotas, personal group information, and default opportunity team.

Picklist
Selection list of options available for specific fields in a Salesforce object, for example, the `Industry` field for accounts. Users can choose a single value from a list of options rather than make an entry directly in the field. See also Master Picklist.

Picklist (Multi-Select)
Selection list of options available for specific fields in a Salesforce object. Multi-select picklists allow users to choose one or more values. Users can choose a value by double clicking on it, or choose additional values from a scrolling list by holding down the CTRL key while clicking a value and using the arrow icon to move them to the selected box.

Picklist Values
Selections displayed in drop-down lists for particular fields. Some values come predefined, and other values can be changed or defined by an administrator.

Platform as a Service (PaaS)
An environment where developers use programming tools offered by a service provider to create applications and deploy them in a cloud. The application is hosted as a service and provided to customers via the Internet. The PaaS vendor provides an API for creating and extending specialized applications. The PaaS vendor also takes responsibility for the daily maintenance, operation, and support of the deployed application and each customer's data. The service alleviates the need for programmers to install, configure,

and maintain the applications on their own hardware, software, and related IT resources. Services can be delivered using the PaaS environment to any market segment.

Platform Edition
A Salesforce edition based on Enterprise, Unlimited, or Performance Edition that does not include any of the standard Salesforce apps, such as Sales or Service & Support.

Primary Key
A relational database concept. Each table in a relational database has a field in which the data value uniquely identifies the record. This field is called the primary key. The relationship is made between two tables by matching the values of the foreign key in one table with the values of the primary key in another.

Production Organization
A Salesforce organization that has live users accessing data.

Professional Edition
A Salesforce edition designed for businesses who need full-featured CRM functionality.

Q

Queue
A holding area for items before they are processed. Salesforce uses queues in a number of different features and technologies.

Query Locator
A parameter returned from the `query()` or `queryMore()` API call that specifies the index of the last result record that was returned.

Query String Parameter
A name-value pair that's included in a URL, typically after a '?' character. For example:

```
https://yourInstance.salesforce.com/001/e?name=value
```

R

Record
A single instance of a Salesforce object. For example, "John Jones" might be the name of a contact record.

Record Name
A standard field on all Salesforce objects. Whenever a record name is displayed in a Lightning Platform application, the value is represented as a link to a detail view of the record. A record name can be either free-form text or an autonumber field. `Record Name` does not have to be a unique value.

Record Type
A record type is a field available for certain records that can include some or all of the standard and custom picklist values for that record. You can associate record types with profiles to make only the included picklist values available to users with that profile.

Record-Level Security
A method of controlling data in which you can allow a particular user to view and edit an object, but then restrict the records that the user is allowed to see.

Recycle Bin
A page that lets you view and restore deleted information. Access the Recycle Bin either by using the link in the sidebar in Salesforce Classic or from the App Launcher in Lightning Experience.

Related Object

Objects chosen by an administrator to display in the Agent console's mini view when records of a particular type are shown in the console's detail view. For example, when a case is in the detail view, an administrator can choose to display an associated account, contact, or asset in the mini view.

Relationship

A connection between two objects, used to create related lists in page layouts and detail levels in reports. Matching values in a specified field in both objects are used to link related data; for example, if one object stores data about companies and another object stores data about people, a relationship allows you to find out which people work at the company.

Relationship Query

In a SOQL context, a query that traverses the relationships between objects to identify and return results. Parent-to-child and child-to-parent syntax differs in SOQL queries.

Report Type

A *report type* defines the set of records and fields available to a report based on the relationships between a primary object and its related objects. Reports display only records that meet the criteria defined in the report type. Salesforce provides a set of pre-defined standard report types; administrators can create custom report types as well.

Role Hierarchy

A record-level security setting that defines different levels of users such that users at higher levels can view and edit information owned by or shared with users beneath them in the role hierarchy, regardless of the organization-wide sharing model settings.

Roll-Up Summary Field

A field type that automatically provides aggregate values from child records in a master-detail relationship.

Running User

Each dashboard has a *running user*, whose security settings determine which data to display in a dashboard. If the running user is a specific user, all dashboard viewers see data based on the security settings of that user—regardless of their own personal security settings. For dynamic dashboards, you can set the running user to be the logged-in user, so that each user sees the dashboard according to his or her own access level.

S

SaaS

See Software as a Service (SaaS).

S-Control

> Note: S-controls have been superseded by Visualforce pages. After March 2010 organizations that have never created s-controls, as well as new organizations, won't be allowed to create them. Existing s-controls will remain unaffected, and can still be edited.

Custom Web content for use in custom links. Custom s-controls can contain any type of content that you can display in a browser, for example a Java applet, an Active-X control, an Excel file, or a custom HTML Web form.

Salesforce Record ID

A unique 15- or 18-character alphanumeric string that identifies a single record in Salesforce.

Salesforce SOA (Service-Oriented Architecture)

A powerful capability of Lightning Platform that allows you to make calls to external Web services from within Apex.

Sandbox

A nearly identical copy of a Salesforce production organization for development, testing, and training. The content and size of a sandbox varies depending on the type of sandbox and the edition of the production organization associated with the sandbox.

Search Layout

The organization of fields included in search results, in lookup dialogs, and in the key lists on tab home pages.

Search Phrase

Search phrases are queries that users enter when searching on www.google.com.

Semi-Join

A semi-join is a subquery on another object in an `IN` clause in a SOQL query. You can use semi-joins to create advanced queries, such as getting all contacts for accounts that have an opportunity with a particular record type. See also Anti-Join.

Session ID

An authentication token that is returned when a user successfully logs in to Salesforce. The Session ID prevents a user from having to log in again every time they want to perform another action in Salesforce. Different from a record ID or Salesforce ID, which are terms for the unique ID of a Salesforce record.

Session Timeout

The time after login before a user is automatically logged out. Sessions expire automatically after a predetermined length of inactivity, which can be configured in Salesforce from Setup by clicking **Security Controls**. The default is 120 minutes (two hours). The inactivity timer is reset to zero if a user takes an action in the web interface or makes an API call.

Setup

A menu where administrators can customize and define organization settings and Lightning Platform apps. Depending on your organization's user interface settings, Setup may be a link in the user interface header or in the dropdown list under your name.

Sharing

Allowing other users to view or edit information you own. There are different ways to share data:

- Sharing Model—defines the default organization-wide access levels that users have to each other's information and whether to use the hierarchies when determining access to data.
- Role Hierarchy—defines different levels of users such that users at higher levels can view and edit information owned by or shared with users beneath them in the role hierarchy, regardless of the organization-wide sharing model settings.
- Sharing Rules—allow an administrator to specify that all information created by users within a given group or role is automatically shared to the members of another group or role.
- Manual Sharing—allows individual users to share records with other users or groups.
- Apex-Managed Sharing—enables developers to programmatically manipulate sharing to support their application's behavior. See Apex-Managed Sharing.

Sharing Model

Behavior defined by your administrator that determines default access by users to different types of records.

Sharing Rule

Type of default sharing created by administrators. Allows users in a specified group or role to have access to all information created by users within a given group or role.

Sites

Salesforce Sites enables you to create public websites and applications that are directly integrated with your Salesforce organization—without requiring users to log in with a username and password.

Snippet

Note: S-controls have been superseded by Visualforce pages. After March 2010 organizations that have never created s-controls, as well as new organizations, won't be allowed to create them. Existing s-controls will remain unaffected, and can still be edited.

A type of s-control that is designed to be included in other s-controls. Similar to a helper method that is used by other methods in a piece of code, a snippet allows you to maintain a single copy of HTML or JavaScript that you can reuse in multiple s-controls.

SOAP (Simple Object Access Protocol)

A protocol that defines a uniform way of passing XML-encoded data.

SOAP API

A SOAP-based Web services application programming interface that provides access to your Salesforce organization's information.

sObject

The abstract or parent object for all objects that can be stored in the Lightning Platform.

Software as a Service (SaaS)

A delivery model where a software application is hosted as a service and provided to customers via the Internet. The SaaS vendor takes responsibility for the daily maintenance, operation, and support of the application and each customer's data. The service alleviates the need for customers to install, configure, and maintain applications with their own hardware, software, and related IT resources. Services can be delivered using the SaaS model to any market segment.

SOQL (Salesforce Object Query Language)

A query language that allows you to construct simple but powerful query strings and to specify the criteria that selects data from the Lightning Platform database.

SOSL (Salesforce Object Search Language)

A query language that allows you to perform text-based searches using the Lightning Platform API.

Standard Object

A built-in object included with the Lightning Platform. You can also build custom objects to store information that is unique to your app.

Syndication Feeds

Give users the ability to subscribe to changes within Salesforce Sites and receive updates in external news readers.

System Log

Part of the Developer Console, a separate window console that can be used for debugging code snippets. Enter the code you want to test at the bottom of the window and click Execute. The body of the System Log displays system resource information, such as how long a line took to execute or how many database calls were made. If the code did not run to completion, the console also displays debugging information.

T

Test Method

An Apex class method that verifies whether a particular piece of code is working properly. Test methods take no arguments, commit no data to the database, and can be executed by the `runTests()` system method either through the command line or in an Apex IDE, such as the Salesforce extensions for Visual Studio Code.

Translation Workbench

The Translation Workbench lets you specify languages you want to translate, assign translators to languages, create translations for customizations you've made to your Salesforce organization, and override labels and translations from managed packages. Everything from custom picklist values to custom fields can be translated so your global users can use Salesforce in their language.

Trigger

A piece of Apex that executes before or after records of a particular type are inserted, updated, or deleted from the database. Every trigger runs with a set of context variables that provide access to the records that caused the trigger to fire, and all triggers run in bulk mode—that is, they process several records at once, rather than just one record at a time.

Trigger Context Variable

Default variables that provide access to information about the trigger and the records that caused it to fire.

U

Unit Test

A unit is the smallest testable part of an application, usually a method. A unit test operates on that piece of code to make sure it works correctly. See also Test Method.

Unlimited Edition

Unlimited Edition is Salesforce's solution for maximizing your success and extending that success across the entire enterprise through the Lightning Platform.

Unmanaged Package

A package that cannot be upgraded or controlled by its developer.

URL (Uniform Resource Locator)

The global address of a website, document, or other resource on the Internet. For example, http://www.salesforce.com.

URL S-Control

> Note: S-controls have been superseded by Visualforce pages. After March 2010 organizations that have never created s-controls, as well as new organizations, won't be allowed to create them. Existing s-controls will remain unaffected, and can still be edited.

An s-control that contains an external URL that hosts the HTML that should be rendered on a page. When saved this way, the HTML is hosted and run by an external website. URL s-controls are also called web controls.

V

Validation Rule

A rule that prevents a record from being saved if it does not meet the standards that are specified.

Visualforce

A simple, tag-based markup language that allows developers to easily define custom pages and components for apps built on the platform. Each tag corresponds to a coarse or fine-grained component, such as a section of a page, a related list, or a field. The components can either be controlled by the same logic that is used in standard Salesforce pages, or developers can associate their own logic with a controller written in Apex.

W

Web Control

See URL S-Control.

Web Links

See Custom Links.

Web Service

A mechanism by which two applications can easily exchange data over the Internet, even if they run on different platforms, are written in different languages, or are geographically remote from each other.

Web Services API

A Web services application programming interface that provides access to your Salesforce organization's information. See also SOAP PI and Bulk API.

WebService Method
An Apex class method or variable that external systems can use, like a mash-up with a third-party application. Web service methods must be defined in a global class.

Web Tab
A custom tab that allows your users to use external websites from within the application.

Automated Actions
Automated actions, such as email alerts, tasks, field updates, and outbound messages, can be triggered by a process, workflow rule, approval process, or milestone.

Workflow Action
A workflow action, such as an email alert, field update, outbound message, or task, fires when the conditions of a workflow rule are met.

Workflow Email Alert
A workflow action that sends an email when a workflow rule is triggered. Unlike workflow tasks, which can only be assigned to application users, workflow alerts can be sent to any user or contact, as long as they have a valid email address.

Workflow Field Update
A workflow action that changes the value of a particular field on a record when a workflow rule is triggered.

Workflow Outbound Message
A workflow action that sends data to an external Web service, such as another cloud computing application. Outbound messages are used primarily with composite apps.

Workflow Queue
A list of workflow actions that are scheduled to fire based on workflow rules that have one or more time-dependent workflow actions.

Workflow Rule
A workflow rule sets workflow actions into motion when its designated conditions are met. You can configure workflow actions to execute immediately when a record meets the conditions in your workflow rule, or set time triggers that execute the workflow actions on a specific day.

Workflow Task
A workflow action that assigns a task to an application user when a workflow rule is triggered.

Wrapper Class
A class that abstracts common functions such as logging in, managing sessions, and querying and batching records. A wrapper class makes an integration more straightforward to develop and maintain, keeps program logic in one place, and affords easy reuse across components. Examples of wrapper classes in Salesforce include the AJAX Toolkit, which is a JavaScript wrapper around the Salesforce SOAP API, wrapper classes such as `CCritical Section` in the CTI Adapter for Salesforce CRM Call Center, or wrapper classes created as part of a client integration application that accesses Salesforce using the SOAP API.

WSC (Web Service Connector)
An XML-based Web service framework that consists of a Java implementation of a SOAP server. With WSC, developers can develop client applications in Java by using Java classes generated from Salesforce Enterprise WSDL or Partner WSDL.

WSDL (Web Services Description Language) File
An XML file that describes the format of messages you send and receive from a Web service. Your development environment's SOAP client uses the Salesforce Enterprise WSDL or Partner WSDL to communicate with Salesforce using the SOAP API.

X

No Glossary items for this entry.

Y

No Glossary items for this entry.

Z

No Glossary items for this entry.

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