
Field Service Lightning Developer Guide

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CHAPTER 1 Field Service Lightning Developer Guide

In this chapter ...

- [Get Ready to Develop with Field Service Lightning](#)
- [Field Service Lightning in the SOAP API](#)
- [Field Service Lightning in the Metadata API](#)
- [Field Service Lightning in the Tooling API](#)
- [Field Service Lightning in the REST API](#)
- [Field Service Lightning Managed Package](#)
- [Field Service Lightning Code Samples](#)
- [Field Service Lightning Mobile App](#)

Developers, start your computers! Field Service Lightning is a powerful, highly customizable toolbox of features that you can use to set up and manage a multiplatform field service operation. This guide offers reference information and code samples to help you understand the structure of Field Service Lightning features and customize them with code.

This guide includes:

- Object diagrams that illustrate the relationships between field service SOAP API objects
- Reference information for field service objects in the SOAP, Metadata, Tooling, and REST APIs
- Apex reference information for the Field Service Lightning managed package
- Apex code samples that you can use to complete common field service tasks

If you're new to field service, we recommend checking out [Get on the Road with Field Service Lightning](#) in Trailhead.

Happy coding!

SEE ALSO:

- [Install the Field Service Lightning Managed Package](#)
- [Field Service Lightning Mobile App](#)

Get Ready to Develop with Field Service Lightning

To prepare to work programmatically with field service features, verify that Field Service Lightning is enabled in your org.

1. From Setup, enter *Field Service Settings* in the Quick Find box, then select **Field Service Settings**.
2. Verify that Field Service Lightning is enabled.
3. Click **Save**.

You now have access to Salesforce's standard field service objects, which are listed in this guide. However, that's just the beginning! To get your feet wet before you start working programmatically with Field Service Lightning, it's a good idea to walk through the setup tasks outlined in [Set Up Field Service Lightning](#).

Field Service Lightning in the SOAP API

Field Service Lightning is based on a suite of standard objects in the SOAP API that relate to each other in different ways. These objects also serve as the foundation of the Field Service Lightning managed package and mobile app. Use the SOAP API to create, retrieve, update or delete field service records, such as work orders, service appointments, and custom objects.

The following object relationship diagrams and reference information are your field service object dictionary. Use them to guide your implementation decisions. For more information on Salesforce's SOAP API, see the [SOAP API Developer's Guide](#).

IN THIS SECTION:

[Field Service Lightning Core Data Model](#)

Use Field Service Lightning's core objects to complete essential field service tasks like managing work orders, defining your service territories, and tracking your workforce.

[Field Service Lightning Inventory Management Data Model](#)

Use Field Service Lightning's inventory objects to track the storage, request, consumption, return, and retirement of items in your inventory.

[Field Service Lightning Preventive Maintenance Data Model](#)

Manage periodic maintenance with the help of maintenance plans, which define the maintenance schedule for specific assets. Maintenance plans typically reflect the terms in a customer's service contract or entitlements.

[Field Service Lightning Pricing Data Model](#)

Link work orders to products or assets in your org to track product pricing and work being performed on your customers' installed products.

[Field Service Lightning SOAP API Objects](#)

Most SOAP API objects used in Field Service Lightning are available only if it is enabled. Some objects are entirely field service-focused, while others can be used for a variety of purposes in Salesforce.

[Supplementary Field Service Lightning Objects](#)

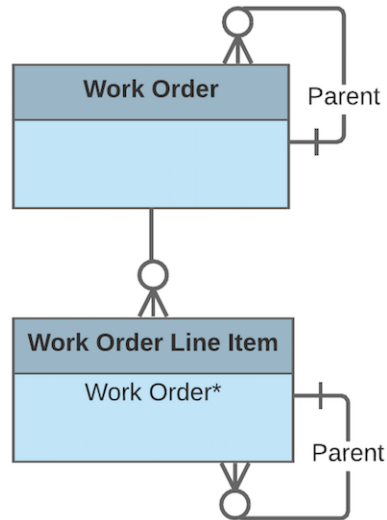
Many Field Service Lightning objects support history tracking or sharing, and therefore have related history and sharing objects in the SOAP API.

Field Service Lightning Core Data Model

Use Field Service Lightning's core objects to complete essential field service tasks like managing work orders, defining your service territories, and tracking your workforce.

 **Note:** Asterisks in the following diagrams signify required fields.

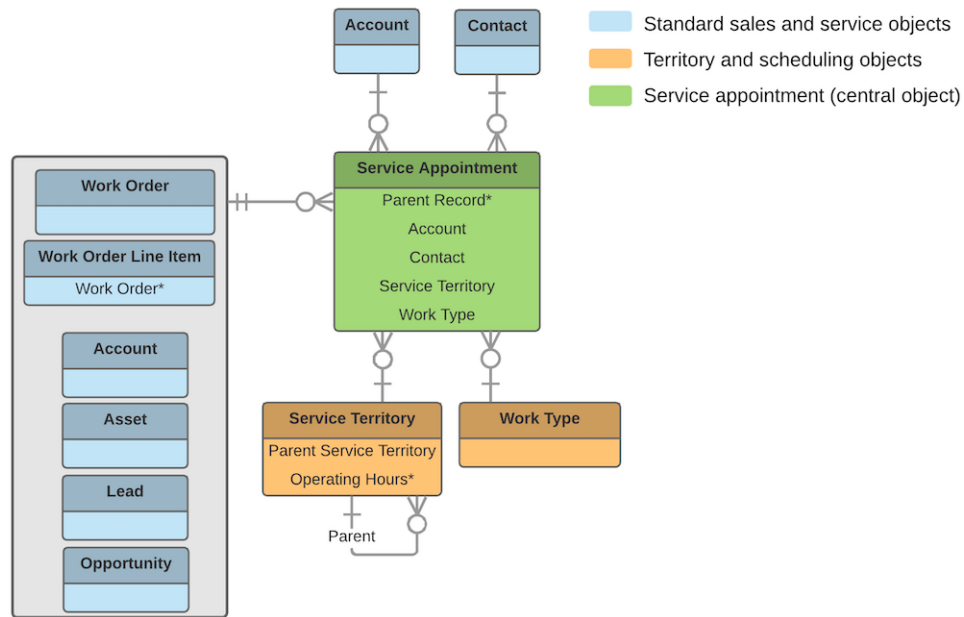
Work orders represent work to be completed for your customers, and are central to field service operations in Salesforce. To divide the work further for billing purposes or to track subtasks, add work order line items, which are child records of work orders.



Work orders offer a great deal of flexibility. They can be associated with many types of records, including:

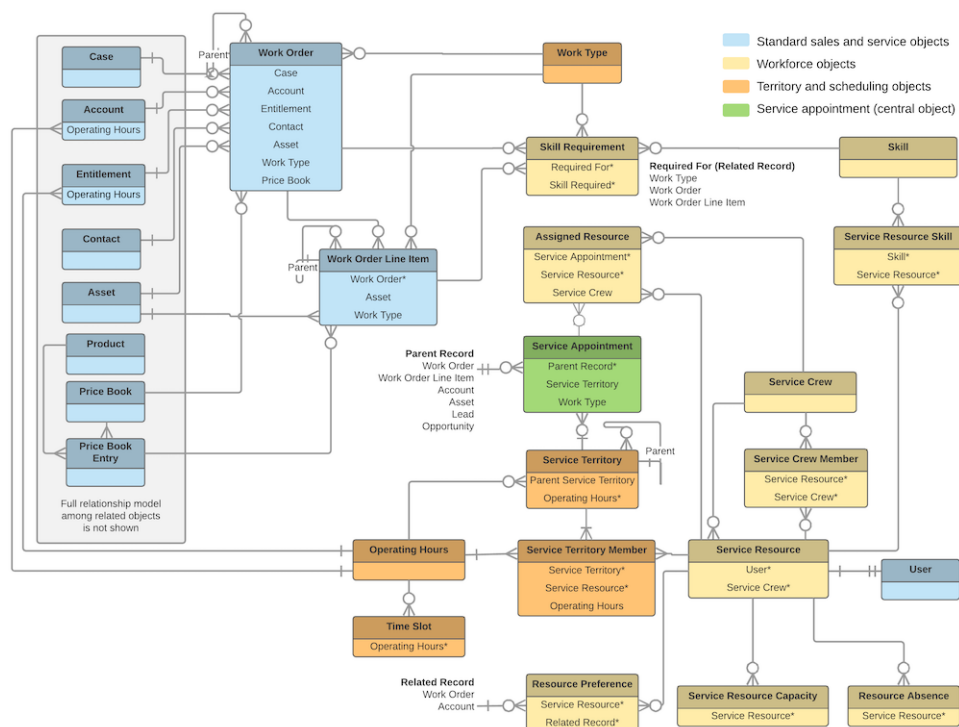
- *Assets*, to track work performed on a specific asset
- *Cases*, to indicate that the work is being performed as part of a customer case
- *Accounts* and *contacts*, representing the customer
- *Entitlements* and *service contracts*, to indicate that the work is being done to fulfill a service-level agreement

While work orders describe the work to be performed, *service appointments* represent the visits your team makes to the field to perform the work. They include scheduling settings such as an arrival window, scheduled start and end times, and appointment duration. Every service appointment has a parent record. The parent record is typically a work order or work order line item, but you can also add child service appointments to accounts, assets, leads, or opportunities to track related visits. A record can have multiple child service appointments; for example, a work order may have two service appointments if two visits were needed to complete the work.



If your team often performs the same tasks for multiple customers, create *work types* to standardize your field service work. Work types are templates that can be applied to work orders and work order line items. On a work type, you can define the duration of the work and add *skill requirements* to indicate the level of expertise needed to complete the work. You can also opt to auto-create a child service appointment on any record that uses the work type.

Work orders and service appointments are supported by a variety of objects that control when and where the work occurs, the nature of the work, and who performs it.



Who Performs the Work

Members of your mobile workforce are represented in Salesforce as *service resources*. A service resource represents an individual technician who can be assigned to a service appointment. You can also create *service crews*, which are groups of service resources with complementary skills and experience that can be assigned to appointments as a unit.

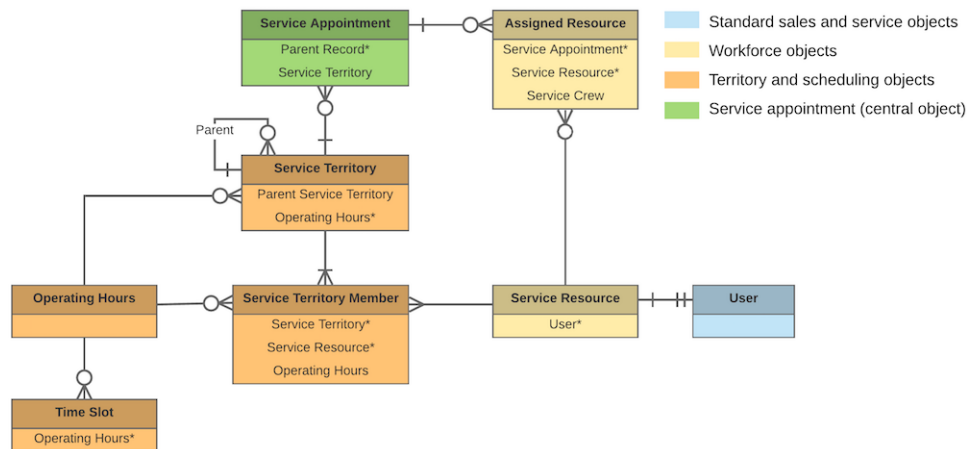
To assign a service resource to a service appointment, create an *assigned resource* record. Assigned resources contain lookups to a service resource and a service appointment. To assign a service crew to an appointment, first create a representative service resource record with a resource type of Crew. Then, create an assigned resource record that looks up to the Crew service resource.

Service resources come with several objects that let you define their skills and availability:

- *Service resource skills* represent a service resource's certifications or levels of expertise.
- *Resource capacity* records track the hourly or job-based capacity of contractors.
- *Resource absences* represent time when a service resource needs to miss work.
- *Resource preferences* designate specific service resources as preferred, required, or excluded on a work order or account.

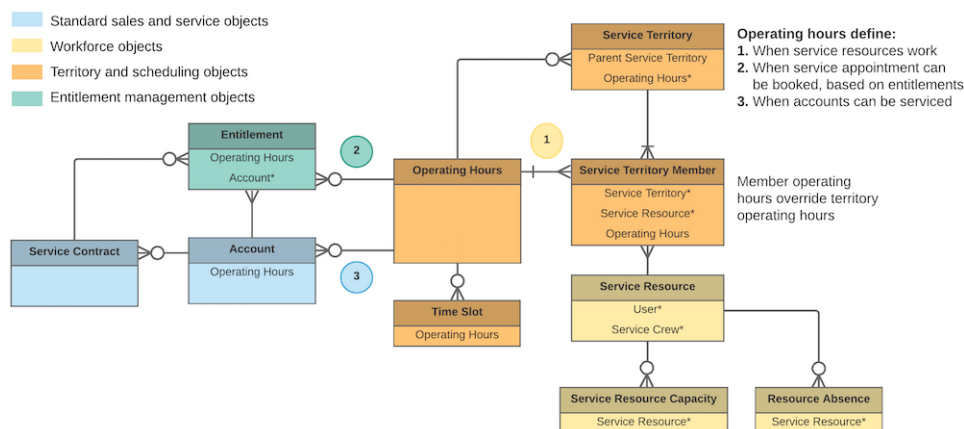
Where the Work Occurs

Service territories are the places where your team can perform field service work and are a way to organize your service resources. They typically represent geographic territories such as cities or counties but may also represent functional divisions like sales versus service. A *work order* can be associated with one service territory. *Service resources* are assigned to one or more service territories as *service territory members* to indicate that they are available to work in the territory.



When the Work Occurs

Operating hours indicate when your team can perform field service work. They can be assigned to accounts, service territories, and service territory members. To add detail to operating hours, create *time slots*, which represent the hours of operation in a particular day.



If a customer *entitlement* includes terms regarding when the customer has access to field service, you can track these hours on the entitlement using the **Operating Hours** field (API name: `SvcApptBookingWindowsId`). For example, if Customer A is entitled to service Monday through Friday from 8 AM to noon, but Customer B is entitled to 24/7 service, you can create operating hours for each customer and assign them to the related entitlement.

SEE ALSO:

[Guidelines for Creating Operating Hours for Field Service](#)

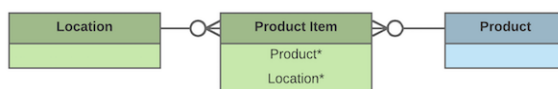
Field Service Lightning Inventory Management Data Model

Use Field Service Lightning's inventory objects to track the storage, request, consumption, return, and retirement of items in your inventory.



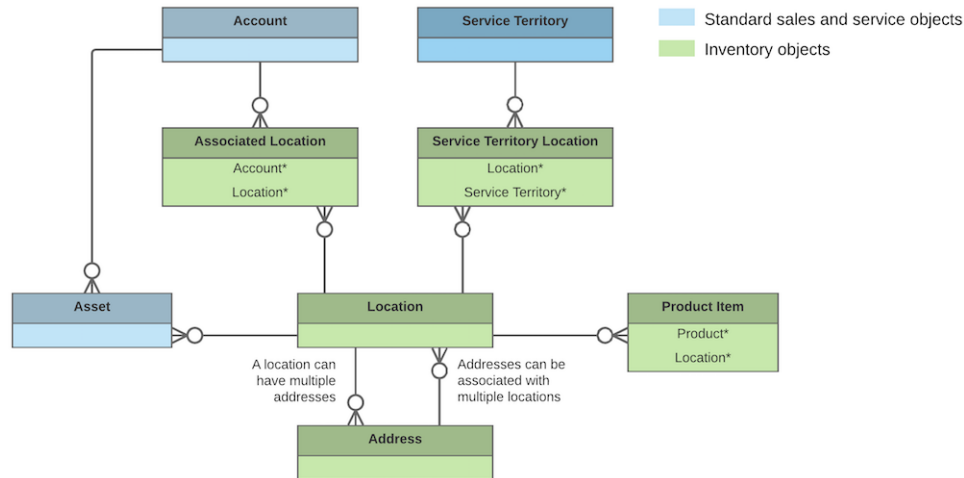
Note: Asterisks in the following diagrams signify required fields.

Inventory management starts with *product items*, which represent the stock of a particular product at a particular location. Each product item is associated with a *product* and a *location* in Salesforce. For example, if you have 50 hammers stored in your Warehouse A location and 200 stored in Warehouse B, create one product item for each location. Product items list a quantity at the location that is updated automatically when inventory is transferred or consumed.



If the Inventory Location option is selected on a location, it means that inventory can be stored there. Product items can be associated only with inventory locations.

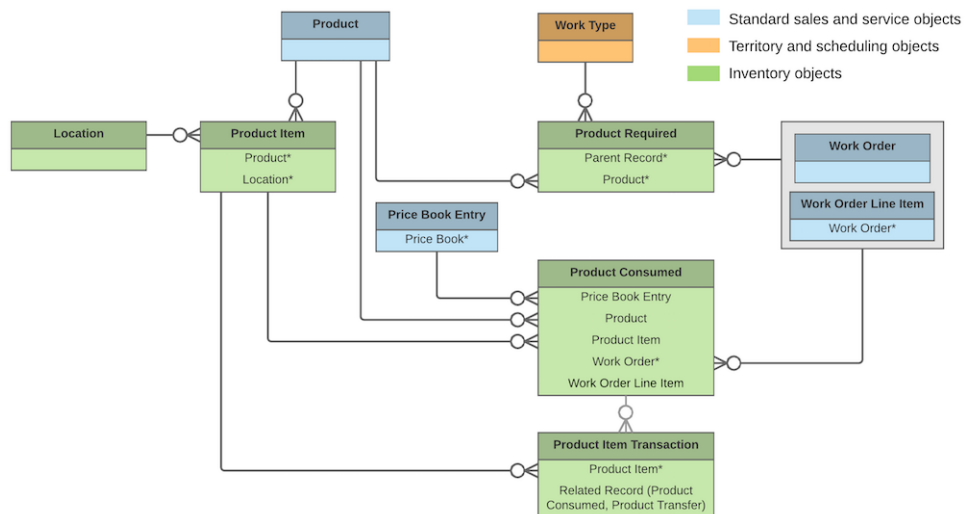
You can link a location to multiple *accounts* and *service territories*. For example, if a location is a shopping mall, you can choose to associate it with every account that operates a store in the mall. You can also create *addresses* for a location, such as a mailing and home address. And to keep track of customer sites, create *associated locations*, which contain lookups to an *account* and a *location*.



If a particular product is needed to complete a field service job, add *products required* to ensure that the assigned service resources arrive prepared. Products required can be child records of *work orders*, *work order line items*, and *work types*. Work order and work order line items inherit their work type's products required.

When a product is consumed during the completion of a work order, track its consumption by creating a *product consumed* record. 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.

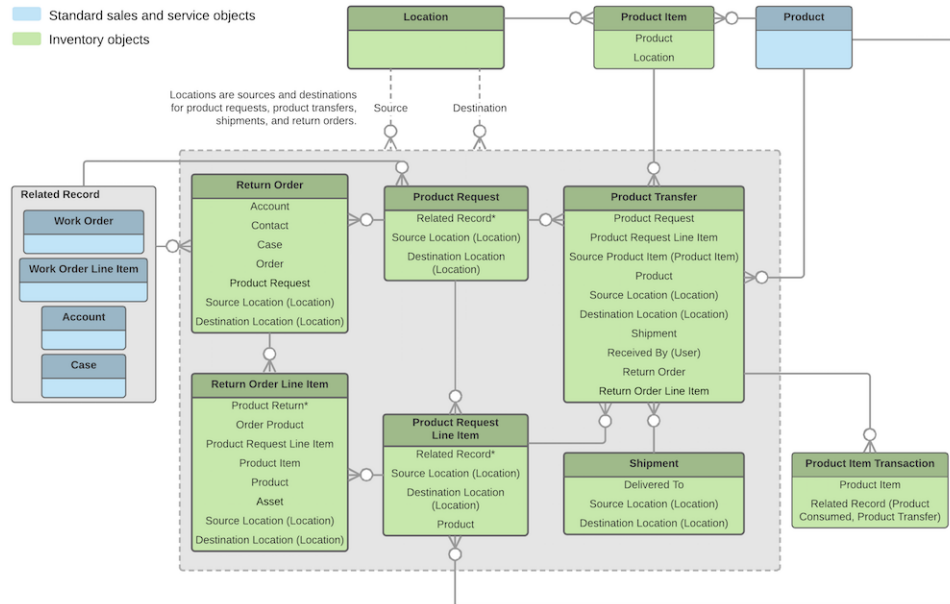
The way you use products consumed depends on how closely you want to track the state of your inventory in Salesforce. If you want to track the entire life cycle of items in your inventory, including their storage, transfer, and consumption, link your product consumed records to product items. This approach ensures that your inventory numbers update automatically 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.



The movement of items into and out of your inventory and between locations is tracked using these objects:

- *Product requests* are orders for products, which you might create when stock is running low.
- *Product request line items* are subdivisions of a product request.
- *Product transfers* track the movement of product items between inventory locations.
- *Shipments* represent the shipment of product items between locations.

- *Product item transactions* describe actions performed on a product item. They're auto-generated records that help you track when inventory is replenished, consumed, or adjusted.
- *Return orders* track the return of a product item due to damage, order errors, or other reasons.
- *Return order line items* are subdivisions of a return order.



SEE ALSO:

- [Set Up Your Field Service Inventory](#)
- [Guidelines for Transferring Inventory](#)
- [Guidelines for Consuming Inventory](#)
- [Common Inventory Management Tasks](#)

Field Service Lightning Preventive Maintenance Data Model

Manage periodic maintenance with the help of maintenance plans, which define the maintenance schedule for specific assets. Maintenance plans typically reflect the terms in a customer's service contract or entitlements.

 **Note:** Asterisks in the following diagram signify required fields.

A *maintenance plan* can be linked to an *account* and *contact*—representing the customer—and to a *service contract*, if the customer has one.

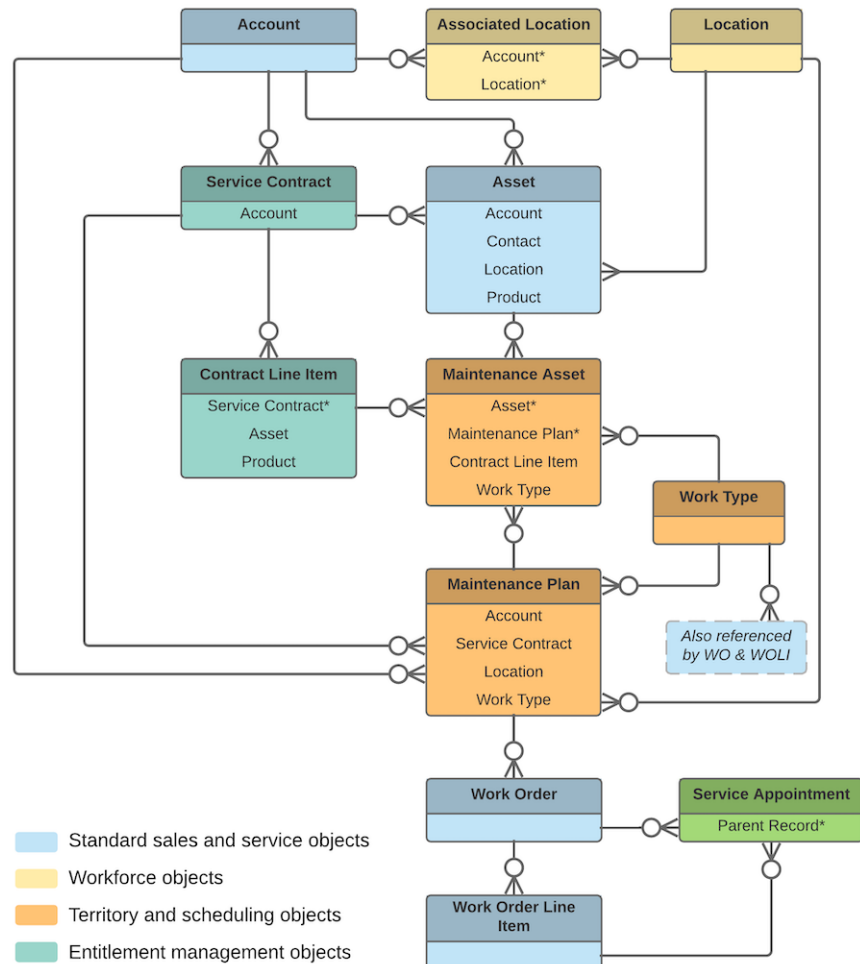
A maintenance plan can cover multiple *assets*. For example, you can create a maintenance plan to track the monthly maintenance of 20 laser printers installed in a customer's office building. The assets covered by a maintenance plan are represented as child records of the maintenance plan called *maintenance assets*. You can also link a maintenance plan to a *location* to indicate where the assets are installed. For example, link a plan to a location of the Site type that represents the office building where the printers are installed.

After you create a maintenance plan, it's time to generate *work orders* for the planned maintenance visits. Maintenance plans come with a Generate Work Orders quick action, which can also be called with Apex code. Your maintenance plan settings determine how many work orders and work order line items are generated at once and what their settings are. You can opt to generate one work order per

maintenance asset for each visit, or to generate one parent work order for each visit with one work order line item per maintenance asset.

Both maintenance plans and maintenance assets can be associated with a *work type*:

- If you specify a work type on a maintenance plan, all of the plan's work orders use that work type.
- If you specify a work type on a maintenance asset, generated work orders that are associated with the maintenance asset use the maintenance asset's work type rather than the maintenance plan's work type.



SEE ALSO:

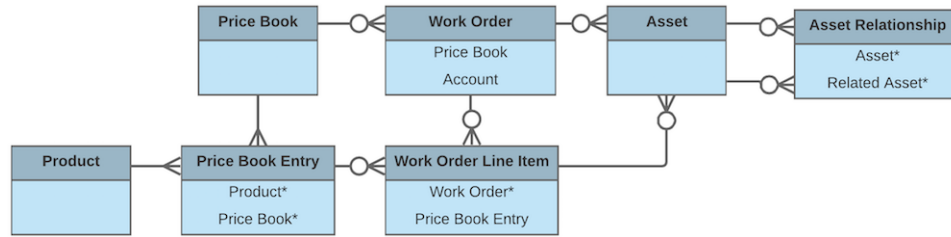
[Generate Work Orders on Maintenance Plans with Apex](#)

Field Service Lightning Pricing Data Model

Link work orders to products or assets in your org to track product pricing and work being performed on your customers' installed products.



Note: Asterisks in the following diagram signify required fields.



If you've set up a product catalog in Salesforce to track the goods and services your business offers, you can associate items in your price books with work orders and their line items, similar to the way you can associate products with opportunities or orders. If you specify a *price book* on a *work order*, this allows you to link each *work order line item* to a *price book entry* (product) from the price book. List price, discount, and quantity are defined at the line-item level.

For example, if you create a work order for a solar panel installation, select a price book in the Price Book lookup field on the work order. Then, use the Price Book Entry lookup field on its work order line items to select goods or services listed in your price book, such as Site Assessment, Solar Panel, and Inverter. A quick glance at a completed work order's line items shows you which products from your product catalog were sold as part of the work order.

After a product is purchased and installed for a customer, it is typically tracked as an *asset* in Salesforce. The Asset lookup field on work orders and work order line items allows you to track work being performed on a specific asset. It also makes it possible to view a history of all work completed on the asset.

If an asset is replaced or upgraded, the relationship between the old and new asset is tracked in an *asset relationship* record. An asset relationship lists a start and end time—for instance, if the replacement asset is being leased—and a relationship type, which must be defined by the admin.

SEE ALSO:

[Work Order Pricing Guidelines for Field Service](#)

[Equal Asset Relationships](#)

Field Service Lightning SOAP API Objects

Most SOAP API objects used in Field Service Lightning are available only if it is enabled. Some objects are entirely field service-focused, while others can be used for a variety of purposes in Salesforce.

The following SOAP API objects are used in Field Service Lightning. Objects not tied to Field Service Lightning enablement are shown with an asterisk (*).



Note: This list doesn't include custom objects provided by the Field Service Lightning managed package.

IN THIS SECTION:

[Address](#)

Represents a mailing, billing, or home address.

[AppExtension](#)

Represents a connection between the Field Service Lightning mobile app and another app, typically for passing record data to the Salesforce app or other apps. This object is available in API version 41.0 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.

[AssetRelationship*](#)

Represents a non-hierarchical relationship between assets due to replacement, upgrade, or other circumstances.

[AssignedResource](#)

Represents a service resource who is assigned to a service appointment in Field Service Lightning 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.

[AssociatedLocation](#)

Represents a link between an account and a location in Field Service Lightning. You can associate multiple accounts with one location. For example, a shopping center location may have multiple customer accounts.

[ContractLineItem*](#)

Represents a product covered by a service contract (customer support agreement). This object is available in API version 18.0 and later.

[DigitalSignature](#)

Represents a signature captured on a service report in field service.

[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.

[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.

[FieldServiceMobileSettings](#)

Represents a configuration of settings that control the Field Service Lightning iOS and Android mobile app experience. This object is available in API version 38.0 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.

[Location](#)

Represents a warehouse, service vehicle, work site, or other element of the region where your team performs field service work.

[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.

[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.

[OperatingHours](#)

Represents the hours in which a service territory, service resource, or account is available for field service work in Field Service Lightning and Lightning Scheduler. This object is available in API version 38.0 and later.

[Pricebook2*](#)

Represents a price book that contains the list of products that your org sells.

[Product2*](#)

Represents a product that your org sells.

[ProductConsumed](#)

Represents an item from your inventory that was used to complete a work order or work order line item in field service.

[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.

[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.

[ProductTransfer](#)

Represents the transfer of inventory between locations in field service.

[ResourceAbsence](#)

Represents a time period in which a service resource is unavailable to work in Field Service Lightning 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. This object is available in API version 42.0 and later.

[ReturnOrderLineItem](#)

Represents a specific product that is returned or repaired as part of a return order in field service. This object is available in API version 42.0 and later.

[ServiceAppointment](#)

Represents an appointment to complete field service work for a customer in Field Service Lightning 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.

[ServiceContract*](#)

Represents a customer support contract (business agreement). 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.

[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 Lightning 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.

[ServiceResourceSkill](#)

Represents a skill that a service resource possesses in Field Service Lightning 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 Lightning 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 Lightning and Lightning Scheduler. This object is available in API version 38.0 and later.

[Shift](#)

Represents a shift for service resource scheduling. Available in API versions 46.0 and later.

[Shipment](#)

Represents the transport of inventory in field service.

[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.

[SkillRequirement](#)

Represents a skill that is required to complete a particular task in Field Service Lightning 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.

[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.

[TimeSlot](#)

Represents a period of time on a specified day of the week during which field service work can be performed in Field Service Lightning and Lightning Scheduler. Operating hours consist of one or more time slots. This object is available in API version 38.0 and later.

[WorkOrder](#)*

Represents field service work to be performed for a customer. 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.

[WorkOrderLineItemStatus](#)

Represents a possible status of a work order line item in field service.

[WorkOrderStatus](#)

Represents a possible status of a work order in field service.

[WorkType](#)

Represents a type of work to be performed in Field Service Lightning 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 Lightning. 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.

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 Lightning must be enabled.

Fields

| Field Name | Details |
|-------------|---|
| Address | <p>Type address</p> <p>Properties Filter, Nillable</p> <p>Description The full address.</p> |
| AddressType | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Sort, Update</p> <p>Description Picklist of address types. The values are:</p> <ul style="list-style-type: none"> • Mailing • Shipping • Billing |

| Field Name | Details |
|-------------------|---|
| | <ul style="list-style-type: none"> • Home |
| City | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The address city.</p> |
| Country | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The address country.</p> |
| Description | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description A brief description of the address.</p> |
| DrivingDirections | <p>Type string</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description Directions to the address.</p> |
| GeocodeAccuracy | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>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.</p> |
| Latitude | <p>Type double</p> |

| Field Name | Details |
|---------------------------|---|
| | <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description Used with <code>Longitude</code> to specify the precise geolocation of the address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.</p> |
| <code>LocationType</code> | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Nillable, Filter, Group, Sort, Update</p> <p>Description Picklist of location types. The available values are:</p> <ul style="list-style-type: none"> • Warehouse (default) • Site • Van • Plant |
| <code>Longitude</code> | <p>Type double</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description Used with <code>Latitude</code> to specify the precise geolocation of the address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places.</p> |
| <code>Name</code> | <p>Type string</p> <p>Properties Autonumber, Defaulted on create, Filter, Sort</p> <p>Description An auto-generated number identifying the address.</p> |
| <code>ParentId</code> | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description A lookup field to the parent location.</p> |

| Field Name | Details |
|------------|---|
| 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. |
| 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.

AppExtension

Represents a connection between the Field Service Lightning mobile app and another app, typically for passing record data to the Salesforce 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 Lightning must be enabled.

Fields

| Field Name | Details |
|---|---|
| <code>AppExtensionLabel</code> | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The label in the UI for the app extension.</p> |
| <code>AppExtensionName</code> | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The API name of the app extension.</p> |
| <code>FieldServiceMobileSettingsId</code> | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description The ID of a set of field service mobile settings.</p> |
| <code>InstallationUrl</code> | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The URL that takes the user to the app install location, such as the App Store or Google Play.</p> |
| <code>LaunchValue</code> | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> |

| Field Name | Details |
|---------------------|--|
| | <p>Description</p> <p>A value directing the Field Service Lightning 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: <code>!{\$Name}</code>.</p> |
| ScopedToObjectTypes | <p>Type</p> <p>string</p> <p>Properties</p> <p>Create, Filter, Group, Nillable, Sort, Update</p> <p>Description</p> <p>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 <code>WorkOrder, ServiceAppointment</code>.</p> |
| Type | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description</p> <p>A picklist of types of app extensions: iOS, Android, Flow, and Lightning Apps</p> |

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 | <p>Type</p> <p>reference</p> <p>Properties</p> <p>Create, Filter, Group, Nillable, Sort, Update</p> |

| Field | Details |
|--------------------------------|---|
| | Description (Required) ID of the Account associated with this asset. Must be a valid account ID. Required if <code>ContactId</code> is not specified. |
| <code>AssetLevel</code> | 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. Once the asset record is updated, the asset level is calculated and automatically updated. |
| <code>AssetProvidedById</code> | Type reference Properties Create, Filter, Group, Nillable, Sort, Update Description The account that provided the asset, typically a manufacturer. |
| <code>AssetServicedById</code> | Type reference Properties Create, Filter, Group, Nillable, Sort, Update Description The account in charge of servicing the asset. |
| <code>ContactId</code> | Type reference Properties Create, Filter, Group, Nillable, Sort, Update Description Required if <code>AccountId</code> is not specified. ID of the Contact associated with this asset. Must be a valid contact ID that has an account parent (but does not need to match the asset's <code>AccountId</code>). |
| <code>Description</code> | Type textarea |

| Field | Details |
|---------------------|--|
| | 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: <ul style="list-style-type: none"> On Off Warning Error |
| 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 (<code>true</code>) or not (<code>false</code>). Default value is <code>false</code> . 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 (<code>true</code>) or not (<code>false</code>). Default value is <code>false</code> . Its UI label is Internal Asset. |
| LastReferencedDate | Type dateTime |

| Field | Details |
|----------------|--|
| | 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. |
| LocationId | Type reference Properties Create, Filter, Group, Nillable, Sort, Update Description The asset's location. Typically, this is the place where the asset is stored, such as a warehouse or van. |
| 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 | <p>Type currency</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description Price paid for this asset.</p> |
| Product2Id | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description (Optional) ID of the Product2 associated with this asset. Must be a valid Product2 ID. Its UI label is Product.</p> |
| ProductCode | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The product code of the related product.</p> |
| ProductDescription | <p>Type string</p> <p>Properties Filter, Group, Sort, Nillable</p> <p>Description The product description of the related product.</p> |
| ProductFamily | <p>Type string</p> <p>Properties Filter, Group, Sort, Nillable</p> <p>Description The product family of the related product.</p> |
| PurchaseDate | <p>Type date</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> |

| Field | Details |
|------------------|---|
| | Description Date on which this asset was purchased. |
| Quantity | Type double Properties Create, Filter, Nillable, Sort, Update Description Quantity purchased or installed. |
| 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: <ul style="list-style-type: none"> • Purchased • Shipped • Installed • Registered • Obsolete |
| StockKeepingUnit | Type string Properties Filter, Group, Nillable, Sort |

| Field | Details |
|--------------|--|
| | Description The SKU assigned to the related product. |
| UsageEndDate | Type date Properties Create, Filter, Group, Nillable, Sort, Update Description Date when usage for this asset ends or expires. |

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 a new 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.

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 |
|--------------------------------------|---|
| <code>AssetId</code> | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description The replacement asset.</p> |
| <code>AssetRelationshipNumber</code> | <p>Type string</p> <p>Properties Autonumber, Defaulted on create, Filter, Sort</p> <p>Description An auto-generated number identifying the asset relationship.</p> |
| <code>FromDate</code> | <p>Type dateTime</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description The day the replacement asset is installed.</p> |
| <code>LastReferencedDate</code> | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The date when the asset relationship was last modified. Its label in the user interface is <code>Last Modified Date</code>.</p> |
| <code>LastViewedDate</code> | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The date the asset relationship was last viewed.</p> |

| Field Name | Details |
|------------------|--|
| RelatedAssetId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The asset being replaced.</p> |
| RelationshipType | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Sort, Update</p> <p>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.</p> |
| ToDate | <p>Type dateTime</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description The day the replacement asset is uninstalled.</p> |

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.

AssignedResource


Represents a service resource who is assigned to a service appointment in Field Service Lightning 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()`

Fields

| Field Name | Details |
|------------------------|--|
| ActualTravelTime | <p>Type double</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>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.</p> |
| AssignedResourceNumber | <p>Type string</p> <p>Properties Autonumber, Defaulted on create, Filter, Sort</p> <p>Description An auto-generated number identifying the resource assignment.</p> |
| EstimatedTravelTime | <p>Type double</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>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.</p> |
| IsPrimaryResource | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>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.</p> |
| ServiceAppointmentId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description The service appointment that the resource is assigned to.</p> |

| Field Name | Details |
|-------------------|--|
| ServiceCrewId | <p>Type reference</p> <p>Properties Create, Update, Filter, Group, Sort, Nillable</p> <p>Description The service crew that the resource is assigned to.</p> <p> Note: Since service resources can represent crews or individuals, appointment are typically assigned to crews in the following way:</p> <ol style="list-style-type: none"> 1. Create a service resource of the Crew type that represent the crew. 2. Create an assigned resource on the service appointment and select the crew resource in the <code>ServiceResourceId</code> field. <p>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 <code>ServiceResourceId</code> field and the crew they belong to in the <code>ServiceCrewId</code> field.</p> |
| ServiceResourceId | <p>Type reference</p> <p>Properties Create, Update, Filter, Group, Sort</p> <p>Description The resource who is assigned to the service appointment.</p> |

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.

AssociatedLocation

Represents a link between an account and a location in Field Service Lightning. 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 Lightning must be enabled.

Fields

| Field Name | Details |
|--------------------------|---|
| ActiveFrom | <p>Type dateTime</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description Date and time the associated location is active.</p> |
| ActiveTo | <p>Type dateTime</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description Date and time the associated location stops being active.</p> |
| AssociatedLocationNumber | <p>Type string</p> <p>Properties Autonumber, Defaulted on create, Filter, Sort</p> <p>Description Auto-generated number identifying the associated location.</p> |
| LastReferencedDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The date the associated location was last modified.</p> |
| LastViewedDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> |

| Field Name | Details |
|----------------|--|
| | 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: <ul style="list-style-type: none"> • 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.

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 | <p>Type reference</p> <p>Properties Create, Filter, Nillable, Update</p> <p>Description Required. ID of the Asset associated with the contract line item. Must be a valid asset ID.</p> |
| Description | <p>Type textarea</p> <p>Properties Create, Nillable, Update</p> <p>Description Description of the contract line item.</p> |
| Discount | <p>Type percent</p> <p>Properties Create, Filter, Nillable, Update</p> <p>Description The discount for the product as a percentage. When updating, if you specify <code>Discount</code> without specifying <code>TotalPrice</code>, the <code>TotalPrice</code> will be adjusted to accommodate the new <code>Discount</code> value, and the <code>UnitPrice</code> will be held constant. If you specify both <code>Discount</code> and <code>Quantity</code>, you must also specify either <code>TotalPrice</code> or <code>UnitPrice</code> so the system can determine which one to automatically adjust.</p> |
| EndDate | <p>Type date</p> <p>Properties Create, Filter, Nillable, Update</p> <p>Description The last day the contract line item is in effect.</p> |
| LastReferencedDate | <p>Type date</p> <p>Properties Filter, Nillable, Sort, Update</p> <p>Description The timestamp for when the current user last viewed a record related to this record.</p> |

| Field | Details |
|--------------------------|--|
| LastViewedDate | <p>Type date</p> <p>Properties Filter, Nillable, Sort, Update</p> <p>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.</p> |
| LineItemNumber | <p>Type string</p> <p>Properties Autonumber, Defaulted on create, Filter, idLookup, Update</p> <p>Description Automatically-generated number that identifies the contract line item.</p> |
| ListPrice | <p>Type currency</p> <p>Properties Filter, Nillable</p> <p>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.</p> |
| ParentContractLineItemId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The line item's parent line item, if it has one.</p> |
| PricebookEntryId | <p>Type reference</p> <p>Properties Create, Filter, Update</p> <p>Description Required. ID of the associated PricebookEntry. Only exists if Product2 is enabled.</p> |
| Product2Id | <p>Type reference</p> |

| Field | Details |
|------------------------|--|
| | 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. |
| 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. |

| Field | Details |
|------------|--|
| Subtotal | <p>Type currency</p> <p>Properties Filter, Nillable</p> <p>Description Contract line item's sales price multiplied by the <code>Quantity</code>.</p> |
| TotalPrice | <p>Type currency</p> <p>Properties Filter, Nillable</p> <p>Description This field is available only for backward compatibility. It represents the total price of the <code>ContractLineItem</code>.</p> <p>If you specify <code>Discount</code> and <code>Quantity</code>, this field or <code>UnitPrice</code> is required.</p> <p>This field is nillable, but you can't set both <code>TotalPrice</code> and <code>UnitPrice</code> to null in the same update request. To insert the <code>TotalPrice</code> 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.</p> |
| UnitPrice | <p>Type currency</p> <p>Properties Create, Filter, Update</p> <p>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.</p> <p>This field or <code>TotalPrice</code> is required. You can't specify both.</p> <p>If you specify <code>Discount</code> and <code>Quantity</code>, this field or <code>TotalPrice</code> is required.</p> |

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.

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 Lightning must be enabled.

Fields

| Field Name | Details |
|------------------------|--|
| DigitalSignatureNumber | Type string Properties Autonumber, Defaulted on create, Filter, Sort Description An auto-generated number identifying the signature. |
| DocumentBody | Type base64 Properties Create Description The captured signature image. |
| DocumentContentType | Type picklist 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 |

| Field Name | Details |
|---------------|--|
| | 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, <code>Default</code> . A service report template can only contain one 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, <code>Technician</code> , <code>Customer</code> , <code>Supervisor</code> , or <code>Supplier</code> . If some service reports will be signed by multiple people in one role—for example, all technicians present at an appointment—create numbered types: <code>Technician 1</code> , <code>Technician 2</code> , 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 |

| Field Name | Details |
|------------|---|
| | 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](#).

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 |

| Field | Details |
|---------------------|--|
| | Description Required. ID of the Asset associated with the entitlement. Must be a valid asset ID. |
| 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. |
| CasesPerEntitlement | Type int Properties Filter, Group, Nillable, Sort Description The total number of cases the entitlement supports. This field is only available if <code>IsPerIncident</code> is <code>true</code> . |
| 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 (<code>true</code>) or not (<code>false</code>). |

| Field | Details |
|-------------------------|---|
| LastReferencedDate | <p>Type date</p> <p>Properties Filter, Nillable, Sort, Update</p> <p>Description The timestamp for when the current user last viewed a record related to this record.</p> |
| LastViewedDate | <p>Type date</p> <p>Properties Filter, Nillable, Sort, Update</p> <p>Description The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (<code>LastReferencedDate</code>) and not viewed.</p> |
| Name | <p>Type string</p> <p>Properties Create, Filter, Update</p> <p>Description Required. Name of the entitlement.</p> |
| SvcApptBookingWindowsId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort, Nillable, Update</p> <p>Description The operating hours that the entitlement's work orders should respect. The label in the user interface is <code>Operating Hours</code>. Available only if Field Service Lightning is enabled.</p> |
| RemainingCases | <p>Type int</p> <p>Properties Create, Filter, Nillable, Update</p> <p>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 <code>IsPerIncident</code> is selected.</p> |

| Field | Details |
|-----------------------|---|
| ServiceContractId | <p>Type reference</p> <p>Properties Create, Filter, Nillable, Update</p> <p>Description Required. ID of the ServiceContract associated with the entitlement. Must be a valid ID.</p> |
| SlaProcessId | <p>Type reference</p> <p>Properties Create, Filter, Nillable, Update</p> <p>Description ID of the SlaProcess associated with the entitlement. This field is available in version 19.0 and later.</p> |
| StartDate | <p>Type date</p> <p>Properties Create, Filter, Nillable, Update</p> <p>Description The first date the entitlement is in effect.</p> |
| Status | <p>Type picklist</p> <p>Properties Filter, Nillable</p> <p>Description Status of the entitlement, such as <code>Expired</code>.</p> |
| SvcApptBookingWindows | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort, Nillable, Update</p> <p>Description The operating hours of the entitlement. This field is visible only if Field Service Lightning is enabled.</p> |
| Type | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Nillable, Update</p> |

| Field | Details |
|-------|--|
| | Description The type of entitlement, such as Web or phone support. |

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.

Entity/Milestone

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


- Entitlement management must be enabled.
- Work orders or Field Service Lightning 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. |

| Field Name | Details |
|-------------------------|---|
| ActualElapsedTimeInHrs | <p>Type double</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The number of hours that it took to complete a milestone. (Elapsed Time) – (Stopped Time) = (Actual Elapsed Time)</p> <p> 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.</p> |
| ActualElapsedTimeInMins | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The number of minutes that it took to complete a milestone. (Elapsed Time) – (Stopped Time) = (Actual Elapsed Time)</p> <p> 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.</p> |
| BusinessHoursId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>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.</p> |
| CompletionDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort, Update</p> <p>Description The date and time the milestone was completed.</p> |
| CurrencyIsoCode | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> |

| Field Name | Details |
|-------------------|--|
| | 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 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 |

| Field Name | Details |
|-----------------|--|
| | <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Icon () that indicates a milestone violation.</p> |
| MilestoneTypeId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The ID of the milestone (for instance, First Response).</p> |
| Name | <p>Type string</p> <p>Properties Filter, Group, Sort, Update</p> <p>Description The name of the milestone.</p> |
| ParentEntityId | <p>Type reference</p> <p>Properties Filter, Group, Sort</p> <p>Description The ID of the record—for example, a work order—that contains the milestone.</p> |
| SlaProcessId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The entitlement process associated with the milestone.</p> |
| StartDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort, Update</p> <p>Description The date and time that milestone tracking started.</p> |

| Field Name | Details |
|-------------------|--|
| StoppedTimeInDays | <p>Type double</p> <p>Properties Filter, Nillable, Sort</p> <p>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.</p> <p> 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.</p> |
| StoppedTimeInHrs | <p>Type double</p> <p>Properties Filter, Nillable, Sort</p> <p>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.</p> <p> 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.</p> |
| StoppedTimeInMins | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>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.</p> <p> 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.</p> |
| TargetDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The date and time to complete the milestone.</p> |

| Field Name | Details |
|----------------------|--|
| TargetResponseInDays | <p>Type double</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The number of days to complete the milestone. Automatically calculated to include the business hours on the record.</p> |
| TargetResponseInHrs | <p>Type double</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The number of hours to complete the milestone. Automatically calculated to include the business hours on the record.</p> |
| TargetResponseInMins | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The number of minutes to complete the milestone. Automatically calculated to include the business hours on the record.</p> |
| TimeRemainingInDays | <p>Type string</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The days that remain before a milestone violation. Automatically calculated to include the business hours on the record.</p> |
| TimeRemainingInHrs | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The hours that remain before a milestone violation. Automatically calculated to include the business hours on the record.</p> |
| TimeRemainingInMins | <p>Type string</p> |

| Field Name | Details |
|-----------------------|---|
| | 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 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.

FieldServiceMobileSettings

Represents a configuration of settings that control the Field Service Lightning 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 Lightning must be enabled.

Fields

| Field Name | Details |
|--------------------------------|---|
| BgGeoLocationAccuracy | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update</p> <p>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:</p> <ol style="list-style-type: none"> 1. Medium: Accurate to within about 100 meters. The API name for this value is <code>Medium</code>. 2. Coarse: Accurate to within about 1 kilometer. The API name for this value is <code>Coarse</code>. 3. Very Coarse: Accurate to within about 3 kilometers. The API name for this value is <code>VeryCoarse</code>. |
| BgGeoLocationMinUpdateFreqMins | <p>Type int</p> |

| Field Name | Details |
|-------------------------|---|
| | <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description Controls the frequency of geolocation polling of services resources while the app is running in the background. Less frequent polling 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.</p> |
| BrandInvertedColor | <p>Type string</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description The color of toasts and the contrast color of the floating action button.</p> |
| ContrastInvertedColor | <p>Type string</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description The color of secondary backgrounds in the UI.</p> |
| ContrastPrimaryColor | <p>Type string</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description The color of primary text.</p> |
| ContrastQuaternaryColor | <p>Type string</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description The color of secondary lines that delineate different areas of the UI.</p> |
| ContrastQuinaryColor | <p>Type string</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description The color of primary backgrounds in the UI.</p> |

| Field Name | Details |
|------------------------------|--|
| ContrastSecondaryColor | <p>Type string</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description The color of secondary text.</p> |
| ContrastTertiaryColor | <p>Type string</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description The color of the icons on the settings screen and of primary lines that delineate different areas of the UI.</p> |
| DefaultListViewDeveloperName | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The API name of the default service appointment list view on the schedule screen.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The API name of the set of field service mobile settings.</p> |
| FeedbackPrimaryColor | <p>Type string</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description The color of error messages.</p> |
| FeedbackSecondaryColor | <p>Type string</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> |

| Field Name | Details |
|------------------------------|---|
| | 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 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: <ul style="list-style-type: none"> Fine: Accurate to within 10 meters. The API name for this value is <code>Fine</code>. Medium: Accurate to within 100 meters. The API name for this value is <code>Medium</code>. Coarse: Accurate to within 1 kilometer. The API name for this value is <code>Coarse</code>. |
| 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 |

| Field Name | Details |
|------------------------|---|
| | <p>Description</p> <p>Controls whether service appointment notifications are sent when the service resource is assigned the appointment (<code>true</code>) or not (<code>false</code>). This field is available in API version 46.0 and later.</p> |
| IsDefault | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort</p> <p>Description</p> <p>Indicates that the set of field service mobile settings is the default set that is automatically assigned to users. You cannot make a different settings record the default, but you can modify the default settings record. Available in API version 41.0 and later.</p> |
| IsDispatchNotification | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description</p> <p>Controls whether service appointment notifications are sent when the service resource is dispatched for the appointment (<code>true</code>) or not (<code>false</code>). This field is available in API version 46.0 and later.</p> |
| IsSendLocationHistory | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description</p> <p>Controls whether geolocation tracking of services resources is enabled.</p> |
| IsShowEditFullRecord | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description</p> <p>Controls whether users can edit records with the field service mobile app.</p> |
| IsTimeSheetEnabled | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Create, Defaulted on create, Filter, Group, Sort, Update</p> |

| Field Name | Details |
|------------------------------|---|
| | Description Controls whether users can access time sheets on their mobile devices (Beta). |
| IsUseSalesforceMobileActions | Type boolean 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 |

| Field Name | Details |
|-------------------------|--|
| | Properties Create, Defaulted on create, Group, Sort, Update Description The secondary color of the tap bar in the app. |
| 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. |
| 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 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. |

| Field Name | Details |
|------------------------|---|
| UpdateScheduleTimeMins | Type int |
| | Properties Create, Defaulted on create, Filter, Group, Sort, Update |
| | Description The number of minutes between attempts to update a user's schedule. |

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 particularly dark or bright conditions. You can choose different branding options for different workers to suit their needs, and assign them to their profiles.

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 Lightning 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 for orgs with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization. |
| KnowledgeArticleId | Type reference |

| Field Name | Details |
|---------------------------|--|
| | <p>Properties Create, Filter, Group, Nillable, Sort</p> <p>Description The ID of the Knowledge article attached to the record. The label in the user interface is Knowledge Article ID.</p> |
| KnowledgeArticleVersionId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort</p> <p>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.</p> <p>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.</p> |
| LinkedEntityId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort</p> <p>Description The ID of the record that the Knowledge article is attached to. The label in the user interface is Linked Record ID.</p> |
| Name | <p>Type string</p> <p>Properties Create, Filter, Group, idLookup, Sort, Update</p> <p>Description The title of the article. The label in the user interface is Article Title.</p> |
| RecordTypeId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The ID of the article's record type, if used. This field is only available for Lightning Knowledge.</p> |

| Field Name | Details |
|------------|--|
| Type | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>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.</p> |

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.

Location

Represents a warehouse, service vehicle, work site, or other element of the region where your team performs field service work.

Supported Calls


`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

| Field Name | Details |
|------------|---|
| CloseDate | <p>Type date</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description Date the location closed or went out of service.</p> |

| Field Name | Details |
|-----------------------|---|
| ConstructionEndDate | <p>Type date</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description Date construction ended at the location.</p> |
| ConstructionStartDate | <p>Type date</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description Date construction began at the location.</p> |
| Description | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description A brief description of the location.</p> |
| DrivingDirections | <p>Type string</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description Directions to the location.</p> |
| IsInventoryLocation | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description Indicates whether the location stores parts.</p> <p> Note: This field must be selected if you want to associate the location with product items.</p> |
| IsMobile | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> |

| Field Name | Details |
|--------------------|--|
| | 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 <code>Last Modified Date</code> . |
| 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. |
| 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. |

| Field Name | Details |
|------------------|--|
| LocationType | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description Picklist of location types. The values are:</p> <ul style="list-style-type: none">• Warehouse (default)• Site• Van• Plant |
| Longitude | <p>Type double</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description The longitude of the location.</p> |
| Name | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The name of the location. For example, Service Van #4.</p> |
| OpenDate | <p>Type date</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description Date the location opened or came into service.</p> |
| OwnerId | <p>Type reference</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description The location's owner or driver.</p> |
| ParentLocationId | <p>Type reference</p> |

| Field Name | Details |
|------------------|---|
| | 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 remodel construction ended at the location. |
| RemodelStartDate | Type date Properties Create, Filter, Group, Nillable, Sort, Update Description Date remodel construction ended at the location. |
| RootLocationId | Type reference Properties Filter, Group, Nillable, Sort Description (Read Only) The top-level location in the location's hierarchy. |
| TimeZone | Type picklist Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update Description Picklist of available time zones. |

| Field Name | Details |
|------------------|---|
| VisitorAddressId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description Lookup to an account's or client's address.</p> |

Usage

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.

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 Lightning must be enabled.

Fields

| Field Name | Details |
|------------------------|--|
| AssetId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The asset associated with the maintenance asset.</p> |
| ContractLineItemId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>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.</p> |
| LastReferencedDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The date when the maintenance asset was last modified. Its label in the user interface is Last Modified Date.</p> |
| LastViewedDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The date when the product request was last viewed.</p> |
| MaintenanceAssetNumber | <p>Type string</p> <p>Properties Autonumber, Defaulted on create, Filter, Sort</p> <p>Description An auto-assigned number that identifies the maintenance asset.</p> |
| MaintenancePlanId | <p>Type reference</p> |

| Field Name | Details |
|------------------------------|---|
| | Properties Create, Filter, Group, Sort Description Maintenance plan associated with the maintenance asset. |
| 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 Lightning must be enabled.


Fields

| Field Name | Details |
|----------------------------|--|
| AccountId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The associated account, which typically represents the customer receiving the maintenance service.</p> |
| ContactId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The associated contact.</p> |
| Description | <p>Type textarea</p> <p>Properties Create, Nillable, Update</p> <p>Description A brief description of the plan.</p> |
| DoesAutoGenerateWorkOrders | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>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 <code>NextSuggestedMaintenanceDate</code> listed on each maintenance asset, or on the maintenance plan if no assets are included. If a <code>GenerationHorizon</code> is specified, the date of generation is that many days earlier.</p> |
| DoesGenerateUponCompletion | <p>Type boolean</p> |

| Field Name | Details |
|---------------|---|
| | <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description If both this option and <code>DoesAutoGenerateWorkOrders</code> 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.</p> <p>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.</p> |
| EndDate | <p>Type date</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The last day the maintenance plan is valid.</p> |
| Frequency | <p>Type int</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description (Required) Amount of time between work orders. The unit is specified in the <code>FrequencyType</code> field.</p> |
| FrequencyType | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description (Required) The unit of frequency:</p> <ul style="list-style-type: none"> • Days • Weeks • Months • Years <p>For example, to perform monthly maintenance visits you need a work order for each visit, so enter 1 as the <code>Frequency</code> and select Months.</p> |

| Field Name | Details |
|-------------------------|--|
| GenerationHorizon | <p>Type int</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description Moves up the timing of batch generation if <code>DoesAutoGenerateWorkOrders</code> 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) <code>NextSuggestedMaintenanceDate</code>. The generation horizon must be a whole number.</p> |
| GenerationTimeframe | <p>Type int</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description (Required) How far in advance work orders are generated in each batch. The unit is specified in the <code>GenerationTimeframeType</code> field.</p> |
| GenerationTimeframeType | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description (Required) The generation timeframe unit:</p> <ul style="list-style-type: none"> • Days • Weeks • Months • Years <p>For example, if you need work orders for six months, enter 6 and select Months.</p> |
| LastReferencedDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The timestamp for when the current user last viewed a record related to this record.</p> |

| Field Name | Details |
|----------------------------|--|
| LastViewedDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>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.</p> |
| LocationId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description Where the service takes place.</p> |
| MaintenancePlanNumber | <p>Type string</p> <p>Properties Autonumber, Defaulted on create, Filter, Sort</p> <p>Description (Read Only) An auto-assigned number that identifies the maintenance plan.</p> |
| MaintenancePlanTitle | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description A name for the maintenance plan.</p> |
| MaintenanceWindowEndDays | <p>Type int</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description Days after the suggested service date on the work order that its service appointment can be scheduled.</p> |
| MaintenanceWindowStartDays | <p>Type int</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> |

| Field Name | Details |
|------------------------------|--|
| | <p>Description</p> <p>Days before the suggested service date on the work order that its service appointment can be scheduled.</p> <p>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.</p> |
| NextSuggestedMaintenanceDate | <p>Type</p> <p>date</p> <p>Properties</p> <p>Create, Filter, Group, Sort, Update</p> <p>Description</p> <p>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.</p> <p>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.</p> <p> 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.</p> |
| OwnerId | <p>Type</p> <p>reference</p> <p>Properties</p> <p>Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description</p> <p>The owner of the maintenance plan.</p> |

| Field Name | Details |
|---------------------------|--|
| ServiceContractId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>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.</p> |
| StartDate | <p>Type date</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The first day the maintenance plan is valid.</p> |
| SvcApptGenerationMethod | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description The service appointment generation method.</p> <ul style="list-style-type: none"> One service appointment per work order One service appointment per work order line item <p>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.</p> <p>If Work Order Generation Method is set to One work order per asset, you can't set a Service Appointment Generation Method.</p> <p>If Work Order Generation Method is set to One work order line item per asset, you must select a Service Appointment Generation Method.</p> |
| WorkOrderGenerationMethod | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description The work order generation method.</p> <ul style="list-style-type: none"> One work order per asset |

| Field Name | Details |
|---------------------------|--|
| | <ul style="list-style-type: none"> One work order line item per asset <p>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.</p> <p>If Work Order Generation Method is left as None, the generation is defaulted to one work order per asset.</p> <p>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.</p> <p>If Work Order Generation Method is set to One work order per asset, you can't set a Service Appointment Generation Method.</p> |
| WorkOrderGenerationStatus | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description (Read Only) Indicates whether the work order generation is in progress or complete. You can generate only one batch at a time.</p> |
| WorkTypeId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>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.</p> |

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.

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 Lightning 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. |

OperatingHours

Represents the hours in which a service territory, service resource, or account is available for field service work in Field Service Lightning 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 | <p>Type textarea</p> <p>Properties Create, Nillable, Update</p> <p>Description The description of the operating hours. Add any details that aren't included in the name.</p> |
| LastReferencedDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The date when the operating hours record was last modified. Its label in the user interface is <code>Last Modified Date</code>.</p> |
| LastViewedDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The date when the operating hours record was last viewed.</p> |
| Name | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The name of the operating hours. For example, <i>Summer Hours</i>, <i>Winter Hours</i>, or <i>Peak Season Hours</i>.</p> |
| TimeZone | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description The time zone which the operating hours fall within.</p> |

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.

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 do not 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. |
| IsActive | Type boolean Properties Create, Defaulted on create, Filter, Group, Sort, Update Description Indicates whether the price book is active (<code>true</code>) or not (<code>false</code>). 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 . |

| Field | Details |
|------------|---|
| IsArchived | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether the price book has been archived (true) or not (false). This field is read only.</p> |
| IsDeleted | <p>Type boolean</p> <p>Properties Defaulted on create, Filter</p> <p>Description Indicates whether the price book has been moved to the Recycle Bin (true) or not (false). Label is Deleted.</p> |
| IsStandard | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>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.</p> |
| Name | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description Required. Name of this object. This field is read-only for the standard price book. Label is Price Book Name.</p> |

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 need to 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 pricebook or custom pricebooks.
- 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. You need to 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 are available in the same API version as this object.

Pricebook2History

History is available for tracked fields of the object.

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: Products are represented by Product2 objects. As of API version 8.0, the Product object is no longer available. Requests containing Product are refused, and responses do not contain the Product object.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

| Field | Details |
|-------------------------------------|--|
| <code>CanUseQuantitySchedule</code> | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether the product can have a quantity schedule (<code>true</code>) or not (<code>false</code>). Label is Quantity Scheduling Enabled.</p> |
| <code>CanUseRevenueSchedule</code> | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether the product can have a revenue schedule (<code>true</code>) or not (<code>false</code>). Label is Revenue Scheduling Enabled.</p> |
| <code>ConnectionReceivedId</code> | <p>Type reference</p> <p>Properties Filter, Nillable</p> <p>Description ID of the <code>PartnerNetworkConnection</code> that shared this record with your organization. This field is available if you enabled Salesforce to Salesforce.</p> |
| <code>ConnectionSentId</code> | <p>Type reference</p> <p>Properties Filter, Nillable</p> <p>Description ID of the <code>PartnerNetworkConnection</code> 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 <code>PartnerNetworkRecordConnection</code> object to forward records to connections.</p> |
| <code>CurrencyIsoCode</code> | <p>Type picklist</p> |

| Field | Details |
|----------------------|--|
| | <p>Properties Filter, Restricted picklist</p> <p>Description Available only for orgs with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the org.</p> |
| Description | <p>Type textarea</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description A text description of this record. Label is Product Description.</p> |
| DisplayUrl | <p>Type url</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description URL leading to a specific version of a record in the linked external data source.</p> |
| ExternalDataSourceId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description ID of the related external data source.</p> |
| ExternalId | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The unique identifier of a record in the linked external data source. For example, <i>ID #123</i>.</p> |
| Family | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>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 <code>describeObjects()</code></p> |

| Field | Details |
|---------------------------------|---|
| | and process the DescribeSObjectResult for the values associated with the <code>Family</code> field. Label is Product Family . |
| <code>IsActive</code> | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description Indicates whether this record is active (<code>true</code>) or not (<code>false</code>). Inactive Product2 records are hidden in many areas in the user interface. You can change the <code>IsActive</code> flag on a Product2 object as often as necessary. Label is Active.</p> |
| <code>IsDeleted</code> | <p>Type boolean</p> <p>Properties Defaulted on create, Filter</p> <p>Description Indicates whether the object has been moved to the Recycle Bin (<code>true</code>) or not (<code>false</code>). Label is Deleted.</p> |
| <code>LastReferencedDate</code> | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The timestamp for when the current user last viewed a record related to this record.</p> |
| <code>LastViewedDate</code> | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (<code>LastReferencedDate</code>) and not viewed.</p> |
| <code>Name</code> | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description Required. Default name of this record. Label is Product Name.</p> |

| Field | Details |
|------------------------------|---|
| NumberOfQuantityInstallments | <p>Type int</p> <p>Properties Filter, Group, Sort</p> <p>Description If the product has a quantity schedule, the number of installments.</p> |
| NumberOfRevenueInstallments | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description If the product has a revenue schedule, the number of installments.</p> |
| ProductCode | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description Default product code for this record. Your org defines the product code naming pattern.</p> |
| QuantityInstallmentPeriod | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description If the product has a quantity schedule, the amount of time covered by the schedule.</p> |
| QuantityScheduleType | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The type of the quantity schedule, if the product has one.</p> |
| QuantityUnitOfMeasure | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> |

| Field | Details |
|---------------------------------------|---|
| | <p>Description</p> <p>Unit of the product; for example, kilograms, liters, or cases. This field comes with only one value, Each, so you may want to create your own. The <code>QuantityUnitOfMeasure</code> field on <code>ProductItem</code> inherits this field's values.</p> |
| <code>RecalculateTotalPrice</code> | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort</p> <p>Description</p> <p>Changes behavior of <code>OpportunityLineItem</code> calculations when a line item has child schedule rows for the <code>Quantity</code> value. When enabled, if the rollup quantity changes, then the quantity rollup value is multiplied against the sales price to change the total price.</p> |
| <code>RevenueInstallmentPeriod</code> | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description</p> <p>If the product has a revenue schedule, the period of time covered by the schedule.</p> |
| <code>RevenueScheduleType</code> | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description</p> <p>The type of the revenue schedule, if the product has one.</p> |
| <code>StockKeepingUnit</code> | <p>Type</p> <p>string</p> <p>Properties</p> <p>Create, Filter, Group, Nillable, Sort, Update</p> <p>Description</p> <p>The SKU for the product. Use in tandem with or instead of the <code>ProductCode</code> field. For example, you can track the manufacturer's identifying code in the <code>Product Code</code> field and assign the product a SKU when you resell it.</p> |

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 |
|---|---|
| <code>RevenueScheduleType</code> | Divide, Repeat |
| <code>RevenueInstallmentPeriod</code> | Daily, Weekly, Monthly, Quarterly, Yearly |
| <code>NumberOfRevenueInstallments</code> | Integer between 1 to 150, inclusive. |
| <code>QuantityScheduleType</code> | Divide, Repeat |
| <code>QuantityInstallmentPeriod</code> | Daily, Weekly, Monthly, Quarterly, Yearly |
| <code>NumberOfQuantityInstallments</code> | Integer between 1 to 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, as well as `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 pricebook or custom pricebooks.
- 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 does not have the products feature, this object does not 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 is 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 noted, they are 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.

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 Lightning 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. |
| LastReferencedDate | Type dateTime |

| Field Name | Details |
|-----------------------|---|
| | 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 Properties Filter, Nillable, Sort Description The date when the product consumed was last viewed. |
| 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. |
| 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. |

| Field Name | Details |
|---------------------|---|
| WorkOrderLineItemId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description Work order line item that the product was consumed for.</p> |

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 life cycle 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. Unless noted, they are 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.

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 Lightning must be enabled.

Fields

| Field Name | Details |
|--------------------|---|
| LastReferencedDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The date when the product item was last modified. Its label in the user interface is Last Modified Date.</p> |
| LastViewedDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The date when the product item was last viewed.</p> |
| LocationId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description Location associated with the product item. This usually indicates where the product item is stored.</p> |
| OwnerId | <p>Type reference</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description The product item's owner.</p> |
| Product2Id | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description Product associated with the product item, which represents the type of product in your inventory.</p> |
| ProductItemNumber | <p>Type string</p> |

| Field Name | Details |
|-----------------------|---|
| | Properties Autonumber, Defaulted on create, Filter, 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 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 Lightning 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 for when the current user last viewed a record related to this record. |

| Field Name | Details |
|------------------------------|---|
| LastViewedDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>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.</p> |
| ProductItemId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description The associated product item.</p> |
| ProductItemTransactionNumber | <p>Type string</p> <p>Properties Autonumber, Defaulted on create, Filter, Sort</p> <p>Description (Read Only) Auto-generated number identifying the product item transaction.</p> |
| Quantity | <p>Type double</p> <p>Properties Create, Filter, Sort</p> <p>Description The quantity of the product item involved in the transaction. If inventory was consumed, the quantity is negative.</p> |
| RelatedRecordId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>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.</p> |
| TransactionType | <p>Type picklist</p> |

| Field Name | Details |
|------------|---|
| | Properties Create, Filter, Group, Restricted picklist, Sort |
| | Description The action that the transaction tracks. <ul style="list-style-type: none"> • 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.

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 Lightning must be enabled.

Fields

| Field Name | Details |
|------------|--------------------------|
| AccountId | Type reference |

| Field Name | Details |
|-----------------------|--|
| | Properties Create, Filter, Group, Nillable, Sort, Update Description The account associated with the product request. |
| 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. |
| 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. |

| Field Name | Details |
|----------------------|--|
| LastViewedDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The date when the product request was last viewed.</p> |
| NeedByDate | <p>Type dateTime</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description Date the product must be delivered by.</p> |
| OwnerId | <p>Type reference</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description The owner of the shipment.</p> |
| ProductRequestNumber | <p>Type string</p> <p>Properties Autonumber, Defaulted on create, Filter, Sort</p> <p>Description An auto-assigned number that identifies the shipment.</p> |
| ShipToAddress | <p>Type address</p> <p>Properties Filter, Nillable</p> <p>Description The address that the product is to be delivered to.</p> |
| ShipToCity | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The city that the product is to be delivered to.</p> |

| Field Name | Details |
|-----------------------|---|
| ShipToCountry | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The country that the product is to be delivered to.</p> |
| ShipToGeocodeAccuracy | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description The accuracy of the geocode for the shipping address.</p> |
| ShipToLatitude | <p>Type double</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description The latitude of the location where the product is to be delivered to.</p> |
| ShipToLongitude | <p>Type double</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description The longitude of the location where the product is to be delivered to.</p> |
| ShipToPostalCode | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The postal code of the address where the product is to be delivered to.</p> |
| ShipToState | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The name of the state where the product is to be delivered to.</p> |

| Field Name | Details |
|------------------|--|
| ShipToStreet | <p>Type textarea</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The street address where the product is to be delivered to.</p> |
| ShipmentType | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Sort, Update</p> <p>Description The type of shipment. The picklist includes the following values by default:</p> <ul style="list-style-type: none">• None• Rush• Overnight• Next Business Day• Pick Up |
| SourceLocationId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The location the product is shipped from.</p> |
| Status | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Sort, Update</p> <p>Description Status of the product transfer.</p> |
| WorkOrderId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The work order that the product request is related to.</p> |

| Field Name | Details |
|---------------------|--|
| 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 Lightning 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. |

| Field Name | Details |
|-----------------------|---|
| CaseId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The case associated with the product request line item.</p> |
| Description | <p>Type textarea</p> <p>Properties Create, Nillable, Update</p> <p>Description Details not recorded in the provided fields.</p> |
| DestinationLocationId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description Where the product is delivered.</p> |
| LastReferencedDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The timestamp for when the current user last viewed a record related to this record.</p> |
| LastViewedDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (<code>LastReferencedDate</code>) and not viewed.</p> |
| NeedByDate | <p>Type dateTime</p> |

| Field Name | Details |
|--------------------------|---|
| | Properties Create, Filter, Nillable, Sort, Update Description Date the product must be delivered by. |
| ParentId | Type reference 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. |
| ProductRequestLineNumber | Type string Properties Autonumber, Defaulted on create, Filter, 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. |

| Field Name | Details |
|-----------------------|--|
| ShipToAddress | <p>Type address</p> <p>Properties Filter, Nillable</p> <p>Description The physical address where the product is needed.</p> |
| ShipToCity | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The city of the address where the product is needed.</p> |
| ShipToCountry | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The country of the address where the product is needed.</p> |
| ShipToGeocodeAccuracy | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>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.</p> <p> Note: This field is available in the API only.</p> |
| ShipToLatitude | <p>Type double</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>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.</p> <p> Note: This field is available in the API only.</p> |

| Field Name | Details |
|------------------|---|
| ShipToLongitude | <p>Type double</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>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.</p> <p> Note: This field is available in the API only.</p> |
| ShipToPostalCode | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The postal code of the address where the product is needed.</p> |
| ShipToState | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The state of the address where the product is needed.</p> |
| ShipToStreet | <p>Type textarea</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The street of the address where the product is needed.</p> |
| ShipmentType | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Sort, Update</p> <p>Description The type of shipment. The picklist includes the following values, which can be customized:</p> <ul style="list-style-type: none">• Rush• Overnight |

| Field Name | Details |
|---------------------|---|
| | <ul style="list-style-type: none"> Next Business Day Pick Up |
| SourceLocationId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description Where the product is at the time of the request.</p> |
| Status | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Sort, Update</p> <p>Description The status of the shipment. The picklist includes the following values, which can be customized:</p> <ul style="list-style-type: none"> Draft Submitted Received |
| WorkOrderId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The work order for which the product is needed.</p> |
| WorkOrderLineItemId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The work order line item for which the product is needed.</p> |

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 Lightning 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 |

| Field Name | Details |
|-----------------------|---|
| | Properties Filter, Group, Nillable, Sort 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, 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.

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 Lightning 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 |

| Field Name | Details |
|--------------------|---|
| | 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 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 |

| Field Name | Details |
|--------------------------|--|
| | 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. |
| ProductTransferNumber | Type string Properties Autonumber, Defaulted on create, Filter, 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 |

| Field Name | Details |
|------------------------------|--|
| | 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. |
| 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 |

| Field Name | Details |
|------------------------|---|
| | 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. |
| 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.

ResourceAbsence

Represents a time period in which a service resource is unavailable to work in Field Service Lightning 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 Lightning must be enabled.

Fields

| Field Name | Details |
|---------------|--|
| AbsenceNumber | Type string Properties Autonumber, Defaulted on create, Filter, Sort Description (Read only) An auto-generated number identifying the absence. |
| Address | Type address Properties Filter, Nillable Description The compound form of the address associated with the absence. |
| City | Type string |


| Field Name | Details |
|--------------------|--|
| | <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The city of the address associated with the absence. Maximum length is 40 characters.</p> |
| Country | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The country of the address associated with the absence. Maximum length is 80 characters.</p> |
| Description | <p>Type textarea</p> <p>Properties Create, Nillable, Update</p> <p>Description The description of the absence.</p> |
| End | <p>Type dateTime</p> <p>Properties Create, Filter, Sort, Update</p> <p>Description The date and time when the absence ends.</p> |
| GeocodeAccuracy | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>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.</p> <p> Note: This field is available in the API only.</p> |
| LastReferencedDate | <p>Type dateTime</p> |

| Field Name | Details |
|----------------|--|
| | <p>Properties Filter, Nillable, Sort</p> <p>Description The date when the resource absence was last modified. Its label in the user interface is <code>Last Modified Date</code>.</p> |
| LastViewedDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The date when the resource absence was last viewed.</p> |
| Latitude | <p>Type double</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description Used with <code>Longitude</code> 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.</p> <p> Note: This field is available in the API only.</p> |
| Longitude | <p>Type double</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description Used with <code>Latitude</code> 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.</p> <p> Note: This field is available in the API only.</p> |
| Postal Code | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The postal code of the address associated with the absence. Maximum length is 20 characters.</p> |

| Field Name | Details |
|------------|---|
| 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 Description The type of absence: <i>Meeting, Training, Medical, or Vacation</i> . The default value is <i>Vacation</i> . You can add custom values if needed. |

Usage

Resource absences you define periods of time when a service resource is unavailable to work. Unless you're using the Field Service Lightning 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 Lightning 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 Lightning must be enabled.

Fields

| Field Name | Details |
|---------------------------------|--|
| <code>LastReferencedDate</code> | Type dateTime Properties Filter, Nillable, Sort Description The date when the resource preference was last modified. |
| <code>LastViewedDate</code> | Type dateTime Properties Filter, Nillable, Sort Description The date when the resource preference was last viewed. |

| Field Name | Details |
|--------------------------|---|
| PreferenceType | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description Resource preference type. Values include:</p> <ul style="list-style-type: none"> • 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 <p>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.</p> |
| RelatedRecordId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description The work order or account with the resource preference.</p> |
| ResourcePreferenceNumber | <p>Type string</p> <p>Properties Autonumber, Defaulted on create, Filter, Sort</p> <p>Description An auto-generated number identifying the resource preference.</p> |
| ServiceResourceId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The service resource that is preferred, required, or excluded.</p> |

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. This object is available in API version 42.0 and later.

Return orders are available in Lightning Experience, Salesforce Classic, the Salesforce app, the Field Service Lightning 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 Lightning 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. |

| Field Name | Details |
|-----------------------|---|
| Description | <p>Type textarea</p> <p>Properties Create, Nillable, Update</p> <p>Description Notes or context about the return order.</p> |
| DestinationLocationId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>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.</p> |
| ExpectedArrivalDate | <p>Type dateTime</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description The date when the items are expected to arrive at the destination location.</p> |
| LastReferencedDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The date when the return order was last modified. Its label in the user interface is <code>Last Modified Date</code>.</p> |
| LastViewedDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The date when the return order was last viewed.</p> |
| OrderId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> |

| Field Name | Details |
|-------------------|---|
| | 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. |
| OwnerId | Type reference Properties Create, Defaulted on create, Filter, Group, Sort, Update Description The owner of the return order. |
| 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. |
| ReturnOrderNumber | Type string Properties Autonumber, Defaulted on create, Filter, 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 |

| Field Name | Details |
|-------------------------|---|
| | <p>Properties Filter, Nillable</p> <p>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.</p> |
| ShipFromCity | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>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.</p> |
| ShipFromCountry | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>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.</p> |
| ShipFromGeocodeAccuracy | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description Accuracy level of the geocode for the return shipping address. See Compound Field Considerations and Limitations for details on geolocation compound fields.</p> <p> Note: This field is available in the API only.</p> |
| ShipFromLatitude | <p>Type double</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>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</p> |

| Field Name | Details |
|--------------------|---|
| | <p>decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields.</p> <p> Note: This field is available in the API only.</p> |
| ShipFromLongitude | <p>Type double</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>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.</p> <p> Note: This field is available in the API only.</p> |
| ShipFromPostalCode | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>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.</p> |
| ShipFromState | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>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.</p> |
| ShipFromStreet | <p>Type textarea</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>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.</p> |

| Field Name | Details |
|------------------|---|
| ShipmentType | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Sort, Update</p> <p>Description The type of shipment associated with the return order. Available values are:</p> <ul style="list-style-type: none"> • Standard (default value) • Rush • Overnight • Next Business Day • Pickup |
| SourceLocationId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>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.</p> |
| Status | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Sort, Update</p> <p>Description The status of the return order. Available values are:</p> <ul style="list-style-type: none"> • Draft • Submitted • Approved • Canceled • Closed |

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.

ReturnOrderLineItem

Represents a specific product that is returned or repaired as part of a return order in field service. This object is available in API version 42.0 and later.

Return orders are available in Lightning Experience, Salesforce Classic, the Salesforce app, the Field Service Lightning 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 Lightning must be enabled.

Fields

| Field Name | Details |
|--------------------------|---|
| <code>AssetId</code> | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The asset associated with the return order line item. One or more of the following fields must be filled out: <code>AssetId</code>, <code>OrderItemId</code>, <code>Product2Id</code>, <code>ProductItemId</code>, and <code>ProductRequestLineItemId</code>.</p> |
| <code>Description</code> | <p>Type textarea</p> |

| Field Name | Details |
|-----------------------|--|
| | 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. |
| 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 <code>Last Modified Date</code> . |
| 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: <code>AssetId</code> , <code>OrderItemId</code> , <code>Product2Id</code> , <code>ProductItemId</code> , and <code>ProductRequestLineItemId</code> . |
| ProcessingPlan | Type picklist Properties Create, Defaulted on create, Filter, Group, Nillable, Sort, Update |

| Field Name | Details |
|--------------------------|---|
| | <p>Description</p> <p>Indicates the preferred fate of the items following their return. Available values are:</p> <ul style="list-style-type: none"> 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 | <p>Type</p> <p>reference</p> <p>Properties</p> <p>Create, Filter, Group, Nillable, Sort, Update</p> <p>Description</p> <p>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.</p> |
| ProductItemId | <p>Type</p> <p>reference</p> <p>Properties</p> <p>Create, Filter, Group, Nillable, Sort, Update</p> <p>Description</p> <p>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.</p> |
| ProductRequestLineItemId | <p>Type</p> <p>reference</p> <p>Properties</p> <p>Create, Filter, Group, Nillable, Sort, Update</p> <p>Description</p> <p>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.</p> |
| QuantityReturned | <p>Type</p> <p>double</p> <p>Properties</p> <p>Create, Filter, Sort, Update</p> <p>Description</p> <p>The quantity of items being returned. If multiple types of products are being returned, track each product in a different return order line item.</p> |

| Field Name | Details |
|-----------------------|---|
| QuantityUnitOfMeasure | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>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.</p> |
| ReasonForReturn | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Sort, Update</p> <p>Description The reason the items are being returned. Available values are:</p> <ul style="list-style-type: none"> • Damaged • Defective • Duplicate Order • Wrong Item • Wrong Quantity • Not Satisfied • Outdated • Other |
| RepaymentMethod | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Sort, Update</p> <p>Description The method by which the customer or owner will be reimbursed for the items being returned. Available values are:</p> <ul style="list-style-type: none"> • 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 | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> |

| Field Name | Details |
|---------------------------|--|
| | Description The return order that the return order line item belongs to. |
| ReturnOrderLineItemNumber | Type string Properties Autonumber, Defaulted on create, Filter, 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. |

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.

ServiceAppointment

Represents an appointment to complete field service work for a customer in Field Service Lightning 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 Lightning must be enabled.



Fields

| Field Name | Details |
|-----------------|--|
| AccountId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>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.</p> |
| ActualDuration | <p>Type int</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>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 <code>Actual Start</code> and <code>Actual End</code> fields, the <code>Actual Duration</code> is automatically populated to list the difference between the <code>Actual Start</code> and <code>Actual End</code>. If the <code>Actual Start</code> and <code>Actual End</code> fields are subsequently updated, the <code>Actual Duration</code> field doesn't re-update, but you can manually update it.</p> |
| ActualEndTime | <p>Type dateTime</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description The actual date and time the appointment ended.</p> |
| ActualStartTime | <p>Type dateTime</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description The actual date and time the appointment started.</p> |
| Address | <p>Type address</p> <p>Properties Filter</p> |

| Field Name | Details |
|------------------------|--|
| | 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 Properties Autonumber, Defaulted on create, Filter, 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 |


| Field Name | Details |
|--------------|---|
| | <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The contact associated with the parent record. If needed, you can manually update the service appointment contact.</p> |
| Country | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The country where the work order is completed. Maximum length is 80 characters.</p> |
| Description | <p>Type textarea</p> <p>Properties Create, Nillable, Update</p> <p>Description The description of the appointment.</p> |
| DueDate | <p>Type dateTime</p> <p>Properties Create, Filter, Sort, Update</p> <p>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.</p> |
| Duration | <p>Type double</p> <p>Properties Create, Nillable, Filter, Sort, Update</p> <p>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 <code>Duration Type</code> field.</p> |
| DurationType | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> |

| Field Name | Details |
|--------------------|--|
| | Description The unit of the Duration: Minutes or Hours. |
| EarliestStartTime | Type dateTime 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. |
| LastReferencedDate | Type dateTime Properties Filter, Nillable, Sort Description The date when the service appointment was last modified. Its label in the user interface is <code>Last Modified Date</code> . |
| LastViewedDate | Type dateTime Properties Filter, Nillable, Sort Description The date when the service appointment was last viewed. |
| Latitude | Type double Properties Create, Filter, Nillable, Sort, Update |

| Field Name | Details |
|----------------------------|--|
| | <p>Description</p> <p>Used with <code>Longitude</code> 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.</p> <p> Note: This field is available in the API only.</p> |
| Longitude | <p>Type</p> <p>double</p> <p>Properties</p> <p>Create, Filter, Nillable, Sort, Update</p> <p>Description</p> <p>Used with <code>Latitude</code> 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.</p> <p> Note: This field is available in the API only.</p> |
| OwnerId | <p>Type</p> <p>reference</p> <p>Properties</p> <p>Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description</p> <p>The owner of the service appointment.</p> |
| ParentRecordId | <p>Type</p> <p>reference</p> <p>Properties</p> <p>Create, Filter, Group, Sort</p> <p>Description</p> <p>The parent record associated with the appointment. The parent record can't be updated after the service appointment is created.</p> |
| ParentRecordStatusCategory | <p>Type</p> <p>string</p> <p>Properties</p> <p>Group, Nillable, Sort</p> <p>Description</p> <p>(Read only) The <code>Status Category</code> 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.</p> |

| Field Name | Details |
|--------------------|--|
| ParentRecordType | <p>Type string</p> <p>Properties Group, Nillable, Sort</p> <p>Description (Read only) The type of parent record: Account, Asset, Lead, Opportunity, Work Order, or Work Order Line Item.</p> |
| PostalCode | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The postal code where the work order is completed. Maximum length is 20 characters.</p> |
| SchedEndTime | <p>Type dateTime</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description The time at which the appointment is scheduled to end. If you are using the Field Service Lightning managed packages with the scheduling optimizer, this field is populated once the appointment is assigned to a resource. <code>Scheduled End - Scheduled Start = Estimated Duration</code>.</p> |
| SchedStartTime | <p>Type dateTime</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description The time at which the appointment is scheduled to start. If you are using the Field Service Lightning managed packages with the scheduling optimizer, this field is populated once the appointment is assigned to a resource.</p> |
| ServiceTerritoryId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> |

| Field Name | Details |
|----------------|---|
| | <p>Description</p> <p>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.</p> |
| State | <p>Type</p> <p>string</p> <p>Properties</p> <p>Create, Filter, Group, Nillable, Sort, Update</p> <p>Description</p> <p>The state where the service appointment is completed. Maximum length is 80 characters.</p> |
| Status | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Create, Defaulted on create, Filter, Group, Nillable, Sort, Update</p> <p>Description</p> <p>The status of the appointment. The picklist includes the following values, which can be customized:</p> <ul style="list-style-type: none"> • <code>None</code>—Default value. • <code>Scheduled</code>—Appointment has been assigned to a service resource. • <code>Dispatched</code>—Assigned service resource has been notified about their assignment. • <code>In Progress</code>—Work has begun. • <code>Completed</code>—Work is complete. • <code>Cannot Complete</code>—Work could not be completed. • <code>Canceled</code>—Work is canceled, typically before any work began |
| StatusCategory | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description</p> <p>The category that each <code>Status</code> value falls into. The <code>Status Category</code> field's values are identical to the default <code>Status</code> values.</p> <p>If you create custom <code>Status</code> values, you must indicate which category it belongs to. For example, if you create a <code>Customer Absent</code> value, you may decide that it belongs in the <code>Cannot Complete</code> category. To learn which processes reference <code>StatusCategory</code>, see How are Status Categories Used?</p> |

| Field Name | Details |
|------------|--|
| Street | <p>Type textarea</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The street number and name where the service appointment is completed.</p> |
| Subject | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description A short phrase describing the appointment.</p> |
| WorkTypeId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>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.</p> <p> 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.</p> |

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 Lightning must be enabled.

Fields

| Field Name | Details |
|-------------|---|
| ApiName | Type string Properties Filter, Group, 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. |
| MasterLabel | Type string Properties Filter, Group, Nillable, Sort |

| Field Name | Details |
|------------|--|
| | 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?](#)

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 | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description ID of the account associated with the service contract.</p> |
| ActivationDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The initial day the service contract went into effect (whereas <code>StartDate</code> may include a renewal date).</p> |
| ApprovalStatus | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Sort</p> <p>Description Approval status of the service contract.</p> |
| BillingAddress (beta) | <p>Type address</p> <p>Properties Filter, Nillable</p> <p>Description The compound form of the billing address. Read-only. See Address Compound Fields for details on compound address fields.</p> |
| BillingCity | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Details for the billing address. Maximum size is 40 characters.</p> |

| Field | Details |
|--------------------|--|
| BillingCountry | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Details for the billing address. Maximum size is 40 characters.</p> |
| BillingCountryCode | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The ISO country code for the service contract's billing address.</p> |
| BillingLatitude | <p>Type double</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description Used with <code>BillingLongitude</code> to specify the precise geolocation of a billing address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.</p> |
| BillingLongitude | <p>Type double</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description Used with <code>BillingLatitude</code> to specify the precise geolocation of a billing address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places.</p> |
| BillingPostalCode | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Details for the billing address. Maximum size is 20 characters.</p> |
| BillingState | <p>Type string</p> <p>Properties Group, Sort, Filter, Nillable</p> |

| Field | Details |
|------------------|---|
| | 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. |
| Discount | Type percent Properties Filter, Nillable, Sort |

| Field | Details |
|--------------------|---|
| | Description The last day the service contract is in effect. Weighted average of all contract line item discounts on the service contract. |
| 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 (<code>true</code>) or not (<code>false</code>). Label is Deleted . |
| 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 (<code>LastReferencedDate</code>) and not viewed. |

| Field | Details |
|-------------------------|--|
| LineItemCount | <p>Type int</p> <p>Properties Filter, Nillable, Group, Sort</p> <p>Description Number of ContractLineItem records associated with the service contract.</p> |
| Name | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description Name of the service contract.</p> |
| OwnerId | <p>Type reference</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description The ID of the user who currently owns the service contract.</p> |
| ParentServiceContractId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The service contract's parent service contract, if it has one.</p> |
| Pricebook2Id | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description ID of the Pricebook2 associated with the service contract. Must be a valid ID.</p> |
| RootServiceContractId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> |

| Field | Details |
|------------------------|---|
| | 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 Description Used with <code>ShippingLongitude</code> to specify the precise geolocation of a shipping address. Acceptable values are numbers between -90 and 90 with up to 15 decimal places. |

| Field | Details |
|--------------------|--|
| ShippingLongitude | <p>Type double</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description Used with <code>ShippingLatitude</code> to specify the precise geolocation of an address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places.</p> |
| ShippingPostalCode | <p>Type string</p> <p>Properties Create, Filter, Nillable, Update</p> <p>Description Details of the shipping address. Postal code maximum size is 20 characters.</p> |
| ShippingState | <p>Type string</p> <p>Properties Create, Filter, Nillable, Update</p> <p>Description Details of the shipping address. State maximum size is 20 characters.</p> |
| ShippingStateCode | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The ISO state code for the service contract's shipping address.</p> |
| ShippingStreet | <p>Type textarea</p> <p>Properties Create, Filter, Nillable, Update</p> <p>Description The street address of the shipping address. Maximum of 255 characters.</p> |
| SpecialTerms | <p>Type textarea</p> <p>Properties Create, Nillable, Update</p> |

| Field | Details |
|------------|--|
| | 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 Description Number of months that the service contract is valid. |
| TotalPrice | Type currency |

| Field | Details |
|-------|---|
| | 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.

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 Lightning must be enabled.

Fields

| Field Name | Details |
|------------|--|
| CrewSize | Type int Properties Create, Filter, Group, Sort, Update |

| Field Name | Details |
|--------------------|--|
| | 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 <code>Last Modified Date</code> . |
| 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 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 Lightning 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. |
| 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 <code>Last Modified Date</code> . |

| Field Name | Details |
|-------------------------|---|
| 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 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.

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 Lightning must be enabled.

Fields

| Field Name | Details |
|--------------------------|---|
| ContentVersionDocumentId | Type reference 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. |

| Field Name | Details |
|-----------------------|---|
| DocumentLength | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The length of the report output.</p> |
| DocumentName | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort</p> <p>Description The name of the report output, always set to Service Report.</p> |
| IsSigned | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether the service report contains one or more signatures.</p> <p> Tip: Add this field to the Service Reports related list on work orders, work order line items, and service appointments.</p> |
| ParentId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>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.</p> |
| ServiceReportLanguage | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Sort, Restricted picklist</p> <p>Description The language used for the service report. The language is selected in the <code>ServiceReportLanguage</code> 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.</p> |

| Field Name | Details |
|---------------------|---|
| ServiceReportNumber | <p>Type string</p> <p>Properties Autonumber, Defaulted on create, Filter, Sort</p> <p>Description An auto-generated number identifying the service report.</p> |
| Template | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort</p> <p>Description The service report template used to generate the service report.</p> <p> 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.</p> |

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 Lightning must be enabled.

Fields

| Field Name | Details |
|---------------|--|
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> |

| Field Name | Details |
|----------------|---|
| | 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 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 Lightning 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 Lightning must be enabled.

Fields

| Field Name | Details |
|-----------------------|--|
| Description | <p>Type textarea</p> <p>Properties Create, Nillable, Update</p> <p>Description The description of the resource.</p> |
| IsActive | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>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.</p> |
| IsCapacityBased | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>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.</p> |
| IsOptimizationCapable | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description This field is reserved for Field Service Lightning and the managed package. Create a custom field instead of using this field to indicate whether optimization should use a service resource.</p> |
| LastKnownLatitude | <p>Type double</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> |

| Field Name | Details |
|-----------------------|---|
| | 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. |
| LastKnownLocationDate | Type dateTime Properties Filter, Nillable, Sort 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 <code>Last Modified Date</code> . |
| LastViewedDate | Type dateTime Properties Filter, Nillable, Sort Description The date when the service resource was last viewed. |

| Field Name | Details |
|-----------------|---|
| LocationId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort, Nillable, Update</p> <p>Description The location associated with the service resource. For example, a service vehicle driven by the service resource.</p> |
| Name | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The resource's name. You'll likely want this to be the name or title of the associated user or service crew.</p> |
| OwnerId | <p>Type reference</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description The owner of the service resource.</p> |
| RelatedRecordId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort, Nillable</p> <p>Description The associated user. Its label in the UI is <code>User</code>. If the service resource represents a service crew rather than a user, leave the <code>User</code> field blank and select the related crew in the <code>ServiceCrewId</code> field.</p> |
| ResourceType | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description Indicates whether the resource is a Technician, Dispatcher, Crew, or Agent. 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.</p> |

| Field Name | Details |
|---------------|--|
| ServiceCrewId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort, Nillable, Update</p> <p>Description The associated service crew. If the service resource represents a crew, select the crew.</p> <p> 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.</p> |

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 Lightning must be enabled.

Fields

| Field Name | Details |
|-----------------|-------------------------------|
| CapacityInHours | <p>Type double</p> |

| Field Name | Details |
|----------------------------------|---|
| | <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description The number of hours that the resource can work per time period. You must fill out this field, the <code>CapacityInWorkItems</code> field, or both.</p> |
| <code>CapacityInWorkItems</code> | <p>Type int</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The total number of service appointments that the resource can complete per time period. You must fill out this field, the <code>CapacityInHours</code> field, or both.</p> |
| <code>CapacityNumber</code> | <p>Type string</p> <p>Properties Autonumber, Defaulted on create, Filter, idLookup, Sort</p> <p>Description (Read only) An auto-generated number identifying the capacity record.</p> |
| <code>EndDate</code> | <p>Type date</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The date the capacity ends; for example, the end date of a contract.</p> |
| <code>LastReferencedDate</code> | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The timestamp for when the current user last viewed a record related to this record.</p> |
| <code>LastViewedDate</code> | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> |

| Field Name | Details |
|--------------------------------|--|
| | <p>Description</p> <p>The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (<code>LastReferencedDate</code>) and not viewed.</p> |
| <code>ServiceResourceId</code> | <p>Type</p> <p>reference</p> <p>Properties</p> <p>Create, Filter, Group, Sort</p> <p>Description</p> <p>The associated service resource. You can set multiple capacities for a resource as long as their start and end dates do not overlap.</p> |
| <code>StartDate</code> | <p>Type</p> <p>date</p> <p>Properties</p> <p>Create, Filter, Group, Sort</p> <p>Description</p> <p>The date the capacity goes into effect.</p> |
| <code>TimePeriod</code> | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description</p> <p>Days, Hours, or Months. For example, if a resource can work 80 hours per month, the capacity's <code>Time Period</code> would be <i>Month</i> and <code>Hours per Time Period</code> would be <i>80</i>.</p> |

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 Lightning 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 Lightning 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.

ServiceResourceSkill

Represents a skill that a service resource possesses in Field Service Lightning 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 Lightning must be enabled.

Fields

| Field Name | Details |
|---------------------------------|--|
| <code>EffectiveEndDate</code> | <p>Type date</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>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.</p> |
| <code>EffectiveStartDate</code> | <p>Type date</p> <p>Properties Create, Filter, Sort, Update</p> <p>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.</p> |
| <code>LastReferencedDate</code> | <p>Type dateTime</p> |

| Field Name | Details |
|-------------------|--|
| | 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 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, 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 Lightning 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 Lightning 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 |

| Field Name | Details |
|--------------------|--|
| | 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 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 |

| Field Name | Details |
|-------------------------------|--|
| | Description The date when the territory was last modified. Its label in the user interface is <code>Last Modified Date</code> . |
| <code>LastViewedDate</code> | Type dateTime Properties Filter, Nillable, Sort Description The date when the territory was last viewed. |
| <code>Latitude</code> | Type double Properties Create, Filter, Nillable, Sort, Update Description Used with <code>Longitude</code> 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. |
| <code>Longitude</code> | Type double Properties Create, Filter, Nillable, Sort, Update Description Used with <code>Latitude</code> 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. |
| <code>Name</code> | Type string Properties Create, Filter, Group, Sort, Update Description The name of the territory. |
| <code>OperatingHoursId</code> | Type reference |

| Field Name | Details |
|---------------------|---|
| | <p>Properties Create, Filter, Group, Sort, Update</p> <p>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.</p> |
| ParentTerritoryId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The territory's parent service territory, if it has one. For example, a <i>Northern California</i> territory can have a <i>State of California</i> territory as its parent. A service territory hierarchy can contain up to 10,000 territories.</p> |
| PostalCode | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The postal code of the address associated with the territory. Maximum length is 20 characters.</p> |
| State | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The state of the address associated with the territory. Maximum length is 80 characters.</p> |
| Street | <p>Type textarea</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The street number and name of the address associated with the territory.</p> |
| TopLevelTerritoryId | <p>Type reference</p> |

| Field Name | Details |
|---|---|
| | 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. |
| <code>TypicalInTerritoryTravelTime</code> | 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 Lightning must be enabled.

Fields

| Field Name | Details |
|---|--|
| <code>LocationId</code> | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The location that is associated with the service territory.</p> |
| <code>ServiceTerritoryId</code> | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description The associated service territory.</p> |
| <code>ServiceTerritoryLocationNumber</code> | <p>Type string</p> <p>Properties Autonumber, Defaulted on create, Filter, Sort</p> <p>Description (Read only) Auto-generated number identifying the service territory location.</p> |

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 Lightning 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 Lightning 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 date Properties Create, Filter, Nillable, Sort, Update |

| Field Name | Details |
|--------------------|---|
| | <p>Description</p> <p>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.</p> |
| EffectiveStartDate | <p>Type</p> <p>date</p> <p>Properties</p> <p>Create, Filter, Sort, Update</p> <p>Description</p> <p>The date when the service resource becomes a member of the service territory.</p> |
| GeocodeAccuracy | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description</p> <p>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.</p> <p> Note: This field is available in the API only.</p> |
| LastReferencedDate | <p>Type</p> <p>dateTime</p> <p>Properties</p> <p>Filter, Nillable, Sort</p> <p>Description</p> <p>The date when the territory member was last modified. Its label in the user interface is <code>Last Modified Date</code>.</p> |
| LastViewedDate | <p>Type</p> <p>dateTime</p> <p>Properties</p> <p>Filter, Nillable, Sort</p> <p>Description</p> <p>The date when the territory member was last viewed.</p> |
| Latitude | <p>Type</p> <p>double</p> <p>Properties</p> <p>Create, Defaulted on create, Filter, Nillable, Sort, Update</p> |

| Field Name | Details |
|-------------------------------|--|
| | <p>Description</p> <p>Used with <code>Longitude</code> to specify the precise geolocation of the member's address. Acceptable values are numbers between -90 and 90 with up to 15 decimal places.</p> <p> Note: This field is available in the API only.</p> |
| <code>Longitude</code> | <p>Type</p> <p>double</p> <p>Properties</p> <p>Create, Defaulted on create, Filter, Nillable, Sort, Update</p> <p>Description</p> <p>Used with <code>Latitude</code> to specify the precise geolocation of the member's address. Acceptable values are numbers between -180 and 180 with up to 15 decimal places.</p> <p> Note: This field is available in the API only.</p> |
| <code>MemberNumber</code> | <p>Type</p> <p>string</p> <p>Properties</p> <p>Autonumber, Defaulted on create, Filter, Sort</p> <p>Description</p> <p>(Read only) An auto-generated number identifying the service territory member.</p> |
| <code>OperatingHoursId</code> | <p>Type</p> <p>reference</p> <p>Properties</p> <p>Create, Filter, Group, Sort, Nillable, Update</p> <p>Description</p> <p>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 <code>Operating Hours</code> lookup field on the member's detail page.</p> |
| <code>PostalCode</code> | <p>Type</p> <p>string</p> <p>Properties</p> <p>Create, Defaulted on create, Filter, Group, Nillable, Sort, Update</p> <p>Description</p> <p>The postal code of the member's address. Maximum length is 20 characters.</p> |

| Field Name | Details |
|--------------------|---|
| ServiceResourceId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The service resource assigned to the service territory.</p> |
| ServiceTerritoryId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description The service territory that the service resource is assigned to.</p> |
| State | <p>Type string</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Sort, Update</p> <p>Description The state of the member's address. Maximum length is 80 characters.</p> |
| Street | <p>Type textarea</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Sort, Update</p> <p>Description The street number and name of the member's address.</p> |
| TerritoryType | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description Primary, Secondary, or Relocation.</p> <ul style="list-style-type: none"> • 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 Lightning managed packages with the |

| Field Name | Details |
|------------|---|
| | <p>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.</p> <p>For example, a service resource might have the following territories:</p> <ul style="list-style-type: none"> • Primary territory: <i>West Chicago</i> • Secondary territories: <ul style="list-style-type: none"> – <i>East Chicago</i> – <i>South Chicago</i> • Relocation territory: <i>Manhattan</i>, 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.

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()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled. Users must have Field Service permission.

Fields

| Field | Details |
|---------|-------------------------|
| EndTime | Type dateTime |

| Field | Details |
|--------------------|--|
| | Properties Create, Filter, Sort, Update Description The date and time that the shift ends. |
| 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 |

| Field | Details |
|--------------------|---|
| | 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. |
| 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: <ul style="list-style-type: none"> • Tentative • Published • Confirmed |
| StatusCategory | Type picklist Properties Filter, Group, Nillable, Restricted picklist, Sort |

| Field | Details |
|---------------------------|--|
| | Description Describes the status of the shift using static values. This field is derived from <code>Status</code> using the mapping defined in setup. Possible values are: <ul style="list-style-type: none"> • <code>Tentative</code> • <code>Published</code> • <code>Confirmed</code> |
| <code>TimeSlotType</code> | 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 <code>TimeSlot</code> field in the <code>OperatingHours</code> object. Possible values are: <ul style="list-style-type: none"> • <code>Normal</code> (default value) • <code>Extended</code> |

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.

Shipment

Represents the transport of inventory in field service.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`



Special Access Rules


Field Service Lightning must be 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. |
| 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. |
| ExpectedDeliveryDate | Type dateTime Properties Create, Filter, Nillable, Sort, Update |

| Field Name | Details |
|--------------------|--|
| | Description Date the product is expected to be delivered. |
| 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. |
| 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. |

| Field Name | Details |
|-------------------------|--|
| ShipFromCity | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The city of the address where the shipment originates.</p> |
| ShipFromCountry | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The country of the address where the shipment originates.</p> |
| ShipFromGeocodeAccuracy | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>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.</p> <p> Note: This field is available in the API only.</p> |
| ShipFromLatitude | <p>Type double</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>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.</p> <p> Note: This field is available in the API only.</p> |
| ShipFromLongitude | <p>Type double</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> |

| Field Name | Details |
|--------------------|--|
| | <p>Description</p> <p>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.</p> <p> Note: This field is available in the API only.</p> |
| ShipFromPostalCode | <p>Type</p> <p>string</p> <p>Properties</p> <p>Create, Filter, Group, Nillable, Sort, Update</p> <p>Description</p> <p>The postal code of the address where the shipment originates.</p> |
| ShipFromState | <p>Type</p> <p>string</p> <p>Properties</p> <p>Create, Filter, Group, Nillable, Sort, Update</p> <p>Description</p> <p>The state of the address where the shipment originates.</p> |
| ShipFromStreet | <p>Type</p> <p>textarea</p> <p>Properties</p> <p>Create, Filter, Group, Nillable, Sort, Update</p> <p>Description</p> <p>The street of the address where the shipment originates.</p> |
| ShipToAddress | <p>Type</p> <p>address</p> <p>Properties</p> <p>Filter, Nillable</p> <p>Description</p> <p>The physical address where the shipment is delivered.</p> |
| ShipToCity | <p>Type</p> <p>string</p> <p>Properties</p> <p>Create, Filter, Group, Nillable, Sort, Update</p> <p>Description</p> <p>The city of the address where the shipment is delivered.</p> |

| Field Name | Details |
|-----------------------|---|
| ShipToCountry | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The country of the address where the shipment is delivered.</p> |
| ShipToGeocodeAccuracy | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>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.</p> <p> Note: This field is available in the API only.</p> |
| ShipToLatitude | <p>Type double</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>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.</p> <p> Note: This field is available in the API only.</p> |
| ShipToLongitude | <p>Type double</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>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.</p> <p> Note: This field is available in the API only.</p> |

| Field Name | Details |
|------------------|--|
| 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 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, 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. |

| Field Name | Details |
|----------------|---|
| Status | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Sort, Update</p> <p>Description The status of the shipment. The picklist includes the following values, which can be customized:</p> <ul style="list-style-type: none"> • <i>Shipped</i>—The product is in transit. • <i>Delivered</i>—The product is at the source location. |
| TrackingNumber | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description Tracking number for the shipment.</p> |
| TrackingUrl | <p>Type url</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description URL of website used for tracking the shipment.</p> |

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.

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()`, `update()`, `query()`, `retrieve()`, `search()`

Fields

| Field Name | Details |
|----------------|---|
| Description | <p>Type textarea</p> <p>Properties Create, Nillable</p> <p>Description The description of the skill.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Create, Filter, Group, Sort</p> <p>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.</p> <p> Note: When creating large sets of data, always specify a unique <code>DeveloperName</code> for each record. If no <code>DeveloperName</code> is specified, performance may slow while Salesforce generates one for each record.</p> |
| Language | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The language of the skill.</p> |
| LastViewedDate | <p>Type date</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The timestamp for when the current user last viewed the skill.</p> |

| Field Name | Details |
|-------------|--|
| MasterLabel | Type string |
| | Properties Create, Filter, Group, idLookup, Sort |
| | 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 Lightning

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.

SkillRequirement

Represents a skill that is required to complete a particular task in Field Service Lightning 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()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

If you want to use SkillRequirement for Field Service use cases, then Field Service Lightning 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 Lightning to be enabled.

Fields

| Field Name | Details |
|-------------------|------------------------|
| IsAdditionalSkill | Type boolean |

| Field Name | Details |
|--------------------|---|
| | <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>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.</p> |
| LastReferencedDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The timestamp for when the current user last viewed a record related to this record.</p> |
| LastViewedDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>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.</p> |
| RelatedRecordId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>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.</p> |
| SkillId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The skill that is required.</p> |
| SkillLevel | <p>Type double</p> |

| Field Name | Details |
|-------------|--|
| | 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. |

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 Lightning 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.

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 Lightning must be enabled.

Fields

| Field Name | Details |
|--------------------|---|
| CurrencyIsoCode | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>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 <code>Currency ISO Code</code>.</p> |
| EndDate | <p>Type date</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The last day the time sheet covers.</p> |
| LastReferencedDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The timestamp for when the current user last viewed a record related to this record.</p> |
| LastViewedDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (<code>LastReferencedDate</code>) and not viewed.</p> |

| Field Name | Details |
|---------------------|---|
| OwnerId | <p>Type reference</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description The owner of the time sheet.</p> |
| ServiceResourceId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The service resource whose time is being tracked with the time sheet.</p> |
| StartDate | <p>Type date</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The first day the time sheet covers.</p> |
| Status | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Sort, Update</p> <p>Description The status of the time sheet. The picklist includes the following values, which can be customized:</p> <ul style="list-style-type: none"> • New • Submitted • Approved |
| TimeSheetEntryCount | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description (Read Only) The number of related time sheet entries.</p> |
| TimeSheetNumber | <p>Type string</p> |

| Field Name | Details |
|------------------------|---|
| | Properties Autonumber, Defaulted on create, Filter, idLookup, Sort Description An auto-generated number identifying the time sheet. |
| TotalDurationInHours | Type double 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.

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 Lightning must be enabled.

Fields

| Field Name | Details |
|--------------------|---|
| CurrencyIsoCode | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>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 <code>Currency ISO Code</code>.</p> <p>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.</p> |
| Description | <p>Type textarea</p> <p>Properties Create, Nillable, Update</p> <p>Description Notes on how the time was spent. For example, "This service took longer than normal because the machine was jammed."</p> |
| EndTime | <p>Type dateTime</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description The date and time the activity finished.</p> |
| LastReferencedDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The timestamp for when the current user last viewed a record related to this record.</p> |
| LastViewedDate | <p>Type dateTime</p> |

| Field Name | Details |
|----------------------|---|
| | <p>Properties Filter, Nillable, Sort</p> <p>Description The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (<code>LastReferencedDate</code>) and not viewed.</p> |
| StartTime | <p>Type dateTime</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description The date and time the activity began.</p> |
| Status | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Sort, Update</p> <p>Description The status of the time sheet entry. The picklist includes the following values, which can be customized:</p> <ul style="list-style-type: none"> • New • Submitted • Approved |
| Subject | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description Activity performed; for example, repair, lunch, or travel.</p> |
| TimeSheetEntryNumber | <p>Type string</p> <p>Properties Autonumber, Defaulted on create, Filter, Sort</p> <p>Description An auto-generated number identifying the time sheet entry.</p> |
| TimeSheetId | <p>Type reference</p> |

| Field Name | Details |
|---------------------|---|
| | 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: <ul style="list-style-type: none"> • 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 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 Lightning 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()`, `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. |
| 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 (<code>LastReferencedDate</code>) and not viewed. |

| Field Name | Details |
|------------------|---|
| MaxAppointments | <p>Type integer</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Sort, Update</p> <p>Description Maximum number of appointments for a single time slot. Available in API version 47.0 and later.</p> |
| OperatingHoursId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description The operating hours that the time slot belongs to. An operating hours' time slots appear in the Operating Hours related list.</p> |
| StartTime | <p>Type time</p> <p>Properties Create, Filter, Sort, Update</p> <p>Description The time when the time slot starts.</p> |
| TimeSlotNumber | <p>Type string</p> <p>Properties Autonumber, Defaulted on create, Filter, idLookup, Sort</p> <p>Description The name of the time slot. The name is auto-populated to a day and time format—for example, <code>Monday 9:00 AM - 10:00 PM</code>—but you can manually update it if you wish.</p> |
| Type | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description The type of time slot. Possible values are <i>Normal</i> and <i>Extended</i>. You may choose to use <i>Extended</i> to represent overtime shifts.</p> |
| WorkTypeGroupId | <p>Type reference</p> |

| Field Name | Details |
|------------|---|
| | 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.

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 Lightning 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 |


| Field Name | Details |
|-----------------|---|
| | 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. |
| BusinessHoursId | Type reference 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 |

| Field Name | Details |
|-----------------|--|
| | 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 <code>Currency ISO Code</code> . |
| 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 <code>Duration Type</code> 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. |
| DurationType | Type picklist |


| Field Name | Details |
|-----------------|---|
| | <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description The unit of the duration: Minutes or Hours.</p> |
| EndDate | <p>Type dateTime</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>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 <code>EndDate</code> to 365 days after the <code>StartDate</code>.</p> |
| EntitlementId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The entitlement associated with the work order.</p> |
| GeocodeAccuracy | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description Accuracy level of the geocode for the address. See Compound Field Considerations and Limitations for details on geolocation compound fields.</p> <p> Note: This field is available in the API only.</p> |
| GrandTotal | <p>Type currency</p> <p>Properties Filter, Nillable, Sort</p> <p>Description Read only. The total price of the work order with tax added.</p> |
| IsClosed | <p>Type boolean</p> <p>Properties Group, Defaulted on create, Filter, Sort</p> |

| Field Name | Details |
|--------------------------------|---|
| | <p>Description</p> <p>Indicates whether the work order is closed (<code>true</code>) or open (<code>false</code>).</p> <p> Tip: Use this field to report on closed versus open work orders.</p> |
| IsGeneratedFromMaintenancePlan | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Group, Defaulted on create, Filter, Sort</p> <p>Description</p> <p>(Read Only) Indicates that the work order was generated from a maintenance plan (<code>true</code>), rather than manually created (<code>false</code>).</p> <p> Note: This option is deselected for work orders that were generated from maintenance plans before Summer '18.</p> |
| IsStopped | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Group, Defaulted on create, Create, Filter, Sort, Update</p> <p>Description</p> <p>Indicates whether a milestone is paused (<code>true</code>) or counting down (<code>false</code>). This field is available only if Enable stopped time and actual elapsed time is selected on the Entitlement Settings page.</p> |
| LastReferencedDate | <p>Type</p> <p>dateTime</p> <p>Properties</p> <p>Filter, Nillable, Sort</p> <p>Description</p> <p>The date when the work order was last modified. Its label in the user interface is <code>Last Modified Date</code>.</p> |
| LastViewedDate | <p>Type</p> <p>dateTime</p> <p>Properties</p> <p>Filter, Nillable, Sort</p> <p>Description</p> <p>The date when the work order was last viewed.</p> |
| Latitude | <p>Type</p> <p>double</p> |

| Field Name | Details |
|-------------------|---|
| | <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>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 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields.</p> <p> Note: This field is available in the API only.</p> |
| LineItemCount | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The number of work order line items in the work order. Its label in the user interface is <code>Line Items</code>.</p> |
| LocationId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The location associated with the work order. For example, a work site.</p> |
| Longitude | <p>Type double</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>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.</p> <p> Note: This field is available in the API only.</p> |
| MaintenancePlanId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> |

| Field Name | Details |
|-------------------|---|
| | <p>Description</p> <p>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.</p> |
| MilestoneStatus | <p>Type</p> <p>string</p> <p>Properties</p> <p>Group, Nillable, Sort</p> <p>Description</p> <p>Indicates the status of a milestone. This field is visible if an entitlement process is applied to a work order.</p> |
| MinimumCrewSize | <p>Type</p> <p>int</p> <p>Properties</p> <p>Create, Filter, Group, Nillable, Sort, Update</p> <p>Description</p> <p>The minimum crew size allowed for a crew assigned to the work order.</p> <p>If you're not using the Field Service Lightning 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.</p> |
| OwnerId | <p>Type</p> <p>reference</p> <p>Properties</p> <p>Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description</p> <p>The work order's assigned owner.</p> |
| ParentWorkOrderId | <p>Type</p> <p>reference</p> <p>Properties</p> <p>Create, Filter, Group, Nillable, Sort, Update</p> <p>Description</p> <p>The work order's parent work order, if it has one.</p> <p> Tip: Create a custom report to view a work order's child work orders.</p> |
| PostalCode | <p>Type</p> <p>string</p> |

| Field Name | Details |
|---------------------|--|
| | <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The postal code where the work order is completed. Maximum length is 20 characters.</p> |
| Pricebook2Id | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>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.</p> |
| Priority | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Sort, Update</p> <p>Description The priority of the work order. The picklist includes the following values, which can be customized:</p> <ul style="list-style-type: none"> • Low • Medium • High • Critical |
| RecommendedCrewSize | <p>Type int</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>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.</p> |
| ReturnOrder | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The return order associated with the work order.</p> |

| Field Name | Details |
|-------------------------|---|
| ReturnOrderLineItem | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The return order line item associated with the work order.</p> |
| RootWorkOrderId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>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.</p> <p> Note: View a work order's child work order in the Child Work Orders related list.</p> |
| ServiceAppointmentCount | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The number of service appointments on the work order.</p> |
| ServiceContractId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The service contract associated with the work order.</p> |
| ServiceReportLanguage | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update, Restricted picklist</p> <p>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.</p> |

| Field Name | Details |
|-------------------------|--|
| | 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 | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>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.</p> |
| ServiceTerritoryId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The service territory where the work order is taking place.</p> |
| SlaExitDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The time that the work order exits the entitlement process.</p> |
| SlaStartDate | <p>Type dateTime</p> <p>Properties Create, Filter, Nillable, Update, Sort</p> <p>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.</p> |
| StartDate | <p>Type dateTime</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>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</p> |

| Field Name | Details |
|----------------|---|
| | quick action that sets the StartDate to the date when the Status changes to In Progress. |
| State | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The state where the work order is completed. Maximum length is 80 characters.</p> |
| Status | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Sort, Update</p> <p>Description The status of the work order. The picklist includes the following values, which can be customized:</p> <ul style="list-style-type: none"> • <i>New</i>—Work order was created, but there hasn't yet been any activity. • <i>In Progress</i>—Work has begun. • <i>On Hold</i>—Work is paused. • <i>Completed</i>—Work is complete. • <i>Cannot Complete</i>—Work could not be completed. • <i>Closed</i>—All work and associated activity is complete. • <i>Canceled</i>—Work is canceled, typically before any work began. <p>Changing a work order's status does not affect the status of its work order line items or associated service appointments.</p> |
| StatusCategory | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The category that each <code>Status</code> value falls into. The <code>Status Category</code> field has eight default values: seven values which are identical to the default <code>Status</code> values, and a <code>None</code> value for statuses without a status category.</p> <p>If you create custom <code>Status</code> values, you must indicate which category it belongs to. For example, if you create a <i>Waiting for Response</i> value, you may decide that it belongs in the <i>On Hold</i> category. To learn which processes reference <code>StatusCategory</code>, see How are Status Categories Used?</p> |
| StopStartDate | <p>Type dateTime</p> |

| Field Name | Details |
|--------------------------|--|
| | <p>Properties Filter, Nillable, Sort</p> <p>Description Indicates when the milestone was paused. The label in the user interface is <code>Stopped Since</code>.</p> |
| Street | <p>Type textarea</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The street number and name where the work order is completed.</p> |
| Subject | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>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.</p> |
| Subtotal | <p>Type currency</p> <p>Properties Filter, Nillable, Sort</p> <p>Description Read only. The total of the work order line items' subtotals before discounts and taxes are applied.</p> |
| SuggestedMaintenanceDate | <p>Type date</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>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.</p> |
| Tax | <p>Type currency</p> |

| Field Name | Details |
|-----------------|---|
| | 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. |
| 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 <code>Duration</code> , <code>Duration Type</code> , 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.

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 Lightning must be enabled.


Fields


| Field Name | Details |
|------------|--|
| Address | <p>Type address</p> <p>Properties Filter, Nillable</p> <p>Description The compound form of the address where the line item is completed.</p> |
| AssetId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The asset associated with the work order line item. The asset is not automatically inherited from the parent work order.</p> |
| City | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The city where the line item is completed. Maximum length is 40 characters.</p> |
| Country | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The country where the line item is completed. Maximum length is 80 characters.</p> |


| Field Name | Details |
|-----------------|---|
| CurrencyIsoCode | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>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 <code>Currency ISO Code</code>.</p> |
| Description | <p>Type textarea</p> <p>Properties Create, Nillable, Update</p> <p>Description The description of the work order line item. Try to describe the steps needed to mark the line item Completed.</p> |
| Discount | <p>Type percent</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>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.</p> |
| Duration | <p>Type double</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description The estimated time required to complete the line item. Specify the duration unit in the <code>Duration Type</code> field.</p> <p> 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.</p> |
| DurationType | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> |

| Field Name | Details |
|--------------------------------|--|
| | 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. |
| 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. |

| Field Name | Details |
|--------------------|--|
| LastReferencedDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The date when the line item was last modified. Its label in the user interface is <code>Last Modified Date</code>.</p> |
| LastViewedDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The date when the line item was last viewed.</p> |
| Latitude | <p>Type double</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description Used with <code>Longitude</code> to specify the precise geolocation of the address where the line item is completed. Acceptable values are numbers between <code>-90</code> and <code>90</code> with up to 15 decimal places.</p> <p> Note: This field is available in the API only.</p> |
| LineItemNumber | <p>Type string</p> <p>Properties Autonumber, Defaulted on create, Filter, idLookup, Sort</p> <p>Description An auto-generated number that identifies the work order line item. Each work order's line items start at 1.</p> |
| ListPrice | <p>Type currency</p> <p>Properties Filter, Nillable, Sort</p> <p>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.</p> |

| Field Name | Details |
|---------------------------|---|
| Longitude | <p>Type double</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description Used with <code>Latitude</code> 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.</p> <p> Note: This field is available in the API only.</p> |
| AssetId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The maintenance plan associated with the work order line item.</p> |
| MinimumCrewSize | <p>Type int</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The minimum crew size allowed for a crew assigned to the line item.</p> <p>If you're not using the Field Service Lightning 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.</p> |
| OrderId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The order associated with the line item. For example, you may need to order replacement parts before you can complete the line item.</p> |
| ParentWorkOrderLineItemId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> |

| Field Name | Details |
|---------------------|--|
| | <p>Description</p> <p>The line item's parent work order line item, if it has one.</p> <p> Tip: Create a custom report to view a line item's child line items.</p> |
| PostalCode | <p>Type</p> <p>string</p> <p>Properties</p> <p>Create, Filter, Group, Nillable, Sort, Update</p> <p>Description</p> <p>The postal code where the line item is completed. Maximum length is 20 characters.</p> |
| PricebookEntryId | <p>Type</p> <p>reference</p> <p>Properties</p> <p>Create, Filter, Group, Nillable, Sort, Update</p> <p>Description</p> <p>The price book entry (product) associated with the line item. The label in the user interface is <code>Product</code>. This field's lookup search only returns products that are included in the work order's price book.</p> |
| Product2Id | <p>Type</p> <p>reference</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>(Read only) The product associated with the price book entry. This field is not available in the user interface. For best results, use the <code>PricebookEntryId</code> field in any custom code or layouts.</p> |
| Quantity | <p>Type</p> <p>double</p> <p>Properties</p> <p>Create, Filter, Nillable, Sort, Update</p> <p>Description</p> <p>Number of units of the line item included in the associated work order.</p> |
| RecommendedCrewSize | <p>Type</p> <p>int</p> <p>Properties</p> <p>Create, Filter, Group, Nillable, Sort, Update</p> |

| Field Name | Details |
|-------------------------|---|
| | 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. |
| ReturnOrder | Type reference Properties Filter, Group, Nillable, Sort Description The return order associated with the work order line item. |
| ReturnOrderLineItem | Type reference Properties Create, Filter, Group, Nillable, Sort, Update 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. |
| 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 |

| Field Name | Details |
|----------------|---|
| | <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The service territory where the line item is completed.</p> |
| StartDate | <p>Type dateTime</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>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.</p> |
| State | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The state where the line item is completed. Maximum length is 80 characters.</p> |
| Status | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Sort, Update</p> <p>Description The status of the line item. The picklist includes the following values, which can be customized:</p> <ul style="list-style-type: none"> • 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 | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> |

| Field Name | Details |
|--------------------------|---|
| | <p>Description</p> <p>The category that each <code>Status</code> value falls into. The <code>Status Category</code> field has eight default values: seven values which are identical to the default <code>Status</code> values, and a <code>None</code> value for statuses without a status category.</p> <p>If you create custom <code>Status</code> values, you must indicate which category it belongs to. For example, if you create a <i>Waiting for Response</i> value, you may decide that it belongs in the <i>On Hold</i> category. To learn which processes reference <code>StatusCategory</code>, see How are Status Categories Used?</p> |
| Street | <p>Type</p> <p>textarea</p> <p>Properties</p> <p>Create, Filter, Group, Nillable, Sort, Update</p> <p>Description</p> <p>The street number and name where the line item is completed.</p> |
| Subject | <p>Type</p> <p>string</p> <p>Properties</p> <p>Create, Filter, Group, Nillable, Sort, Update</p> <p>Description</p> <p>A word or phrase describing the line item.</p> |
| Subtotal | <p>Type</p> <p>currency</p> <p>Properties</p> <p>Filter, Nillable, Sort</p> <p>Description</p> <p>(Read only) The line item's unit price multiplied by the quantity.</p> |
| SuggestedMaintenanceDate | <p>Type</p> <p>dateTime</p> <p>Properties</p> <p>Create, Filter, Nillable, Sort, Update</p> <p>Description</p> <p>Date when maintenance work is planned.</p> |
| TotalPrice | <p>Type</p> <p>currency</p> <p>Properties</p> <p>Filter, Nillable, Sort</p> |

| Field Name | Details |
|-------------|---|
| | Description Read only. The line item's subtotal with discounts applied. |
| UnitPrice | Type currency Properties Create, Filter, Nillable, Sort, Update 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 <code>Duration</code> , <code>Duration Type</code> , 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.

WorkOrderLineItemStatus

Represents a possible status of a work order line item in field service.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

| Field Name | Details |
|-------------|--|
| ApiName | Type string Properties Filter, Group, 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. |
| MasterLabel | Type string Properties Filter, Group, Nillable, Sort Description The label for the picklist value that appears in the UI. |

| Field Name | Details |
|------------|--|
| SortOrder | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The value's position in the drop-down list of values in the UI.</p> |
| StatusCode | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The status category that the value corresponds to. The Status Category field has seven values which are identical to the default Status values.</p> |

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?](#)

WorkOrderStatus

Represents a possible status of a work order in field service.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled.

Fields


| Field Name | Details |
|-------------|--|
| ApiName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The API name of the status value.</p> |
| IsDefault | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates that the status value is the default status on work orders. Only one status value can be the default.</p> |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The label for the picklist value that appears in the UI.</p> |
| SortOrder | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The value's position in the drop-down list of values in the UI.</p> |
| StatusCode | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The status category that the value corresponds to. The Status Category field has seven values which are identical to the default Status values.</p> |

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?](#)

WorkType

Represents a type of work to be performed in Field Service Lightning 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 Lightning 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 |

| Field Name | Details |
|---------------------------------|--|
| | Properties Create, Filter, Group, Defaulted on create, Restricted picklist, Sort, Update Description The unit of the <code>EstimatedDuration</code> : Minutes or Hours. |
| <code>EstimatedDuration</code> | Type double Properties Create, Filter, Group, Nillable, Sort, Update Description The estimated length of the work. The estimated duration is in minutes or hours based on the value selected in the <code>DurationType</code> field. |
| <code>LastReferencedDate</code> | Type dateTime Properties Filter, Nillable, Sort Description The date when the work type was last modified. Its label in the user interface is <code>Last Modified Date</code> . |
| <code>LastViewedDate</code> | Type dateTime Properties Filter, Nillable, Sort Description The date when the work type was last viewed by the current user. |
| <code>MinimumCrewSize</code> | 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 Lightning 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. |
| <code>Name</code> | Type string |

| Field Name | Details |
|-------------------------|--|
| | <p>Properties Create, Filter, Group, Sort, Update</p> <p>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."</p> |
| OwnerId | <p>Type reference</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description The work type's owner.</p> |
| RecommendedCrewSize | <p>Type int</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>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.</p> |
| ServiceReportTemplateId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>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.</p> |
| ShouldAutoCreateSvcAppt | <p>Type boolean</p> <p>Properties Create, Filter, Group, Defaulted on create, Sort, Update</p> <p>Description Select this option to have a service appointment automatically created on work orders and work order line items that use the work type.</p> |

Field Name**Details****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 Lightning. 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 |
|------------------------------------|--|
| <code>AdditionalInformation</code> | <p>Type multipicklist</p> <p>Properties Create, Filter, Nillable, Update</p> <p>Description Additional information about the types of appointments this work type group represents.</p> |
| <code>Description</code> | <p>Type textarea</p> <p>Properties Create, Nillable, Update</p> <p>Description A description of this work type group.</p> |
| <code>GroupType</code> | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description The category of this work type group. Possible values are:</p> <ul style="list-style-type: none"> • <code>Capacity</code>—A group of work types used to define a work capacity limit in Field Service Lightning. • <code>Default</code>—A non-capacity group of work types used in Lightning Scheduler. |
| <code>IsActive</code> | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>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.</p> |
| <code>LastReferencedDate</code> | <p>Type dateTime</p> |

| Field | Details |
|----------------|--|
| | 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 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 |

| Field | Details |
|-------|--|
| | 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.

Supplementary Field Service Lightning Objects

Many Field Service Lightning objects support history tracking or sharing, and therefore have related history and sharing objects in the SOAP API.

The following list links to reference information for these supplementary objects. Most objects are available only if Field Service Lightning is enabled. Objects not tied to Field Service Lightning enablement are shown with an asterisk (*).

- [AssetOwnerSharingRule*](#)
- [AssetShare*](#)
- [LinkedArticleHistory](#)
- [OperatingHoursHistory](#)
- [ProductRequestHistory](#)
- [ProductRequestOwnerSharingRule](#)
- [ProductRequestShare](#)
- [ProductTransferHistory](#)
- [ProductTransferOwnerSharingRule](#)
- [ProductTransferShare](#)
- [ResourceAbsenceHistory](#)
- [ResourcePreferenceHistory](#)
- [ReturnOrderHistory](#)
- [ReturnOrderLineItemHistory](#)
- [ReturnOrderOwnerSharingRule](#)
- [ReturnOrderShare](#)
- [ServiceAppointmentHistory](#)
- [ServiceAppointmentOwnerSharingRule](#)
- [ServiceAppointmentShare](#)
- [ServiceCrewHistory](#)

- [ServiceCrewMemberHistory](#)
- [ServiceCrewOwnerSharingRule](#)
- [ServiceCrewShare](#)
- [ServiceResourceCapacityHistory](#)
- [ServiceResourceHistory](#)
- [ServiceResourceOwnerSharingRule](#)
- [ServiceResourceShare](#)
- [ServiceResourceSkillHistory](#)
- [ServiceTerritoryHistory](#)
- [ServiceTerritoryMemberHistory](#)
- [SkillRequirementHistory](#)
- [TimeSheetEntryHistory](#)
- [TimeSheetHistory](#)
- [TimeSheetOwnerSharingRule](#)
- [TimeSheetShare](#)
- [TimeSlotHistory](#)
- [WorkOrderHistory*](#)
- [WorkOrderLineItemHistory*](#)
- [WorkOrderShare*](#)
- [WorkTypeGroupHistory](#)
- [WorkTypeGroupMemberHistory](#)
- [WorkTypeGroupShare](#)
- [WorkTypeHistory](#)
- [WorkTypeOwnerSharingRule](#)
- [WorkTypeShare](#)

Field Service Lightning in the Metadata API

The following types in the Metadata API are used in Field Service Lightning.

IN THIS SECTION:

[FieldServiceSettings](#)

Represents an organization's Field Service Lightning settings.

[Skill](#)

Represents the settings for a skill used for field service or to route chats to agents in Chat, such as the name of the skill and which agents the skills are assigned to.

[TimeSheetTemplate](#)

Represents a template for creating time sheets in Field Service Lightning. This type extends the Metadata metadata type and inherits its `fullName` field.

FieldServiceSettings

Represents an organization's Field Service Lightning settings.

To learn more about Field Service Lightning settings, see [Enable Field Service Lightning](#) in the Salesforce Help.

In the package manifest, all organization settings metadata types are accessed using the "Settings" name. See Settings for more details.

Version

FieldServiceSettings is available in API version 40.0 and later.

Fields

| Field | Field Type | Description |
|---------------------------|------------|--|
| doesShareSaParentWoWithAr | boolean | Shares service appointments' parent work orders with their assigned resources. This setting applies only if <code>doesShareSaWithAr</code> is selected and sharing access for work orders is set to Private or Public Read Only. Technician assigned resources get Read-Write access to their work orders. For assigned resources of type Crew, the crew leader gets Read-Write access and crew members get Read access. If the service appointment's parent is a work order line item, assigned resources get access to the associated work order. |
| doesShareSaWithAr | boolean | Shares dispatched service appointments with their assigned resources. This setting applies only if sharing access for service appointments is set to Private or Public Read Only. Technician assigned resources get Read-Write access to their service appointments. For assigned resources of type Crew, the crew leader gets Read-Write access and crew members get Read access. |
| enableWorkOrders | boolean | Enables Work Orders for the org. This setting allows users to use the Work Order object, whether or not Field Service is enabled. When Field Service is enabled, you can't turn off Work Orders. |
| isGeoCodeSyncEnabled | boolean | Syncs the location of a Service Resource to an Inventory object. |

| Field | Field Type | Description |
|--|------------|---|
| isLocationHistoryEnabled | boolean | Tracks the location history of a Service Resource. |
| fieldServiceNotificationsOrgPref | boolean | <p>Turns on in-app notifications for the Salesforce app and Lightning Experience users when any of the following actions occurs on a work order or work order line item that they own or follow:</p> <ul style="list-style-type: none"> • A text or file post is added • A tracked field is updated • The record owner changes • The resource assignments change on a related service appointment <p>If the option to track all related objects is selected in the feed tracking settings for work orders, users are also notified when child records of work orders—such as service appointments—are created or deleted.</p> |
| fieldServiceOrgPref | boolean | Indicates whether Field Service Lightning is enabled. |
| serviceAppointmentsDueDateOffsetOrgValue | int | Indicates the number of days past the Created Date that the Due Date on auto-created service appointments should fall. Work types include an option to automatically add a service appointment to new work orders or work order line items using the work type. |
| workOrderLineItemSearchFields | string | The work order line item fields that the search engine should scan to suggest knowledge articles on work order line items. |
| workOrderSearchFields | string | The work order fields that the search engine should scan to suggest knowledge articles on work orders. |

Declarative Metadata Sample Definition

This sample file shows a subset of all of the possible field service settings that you can customize.

```
<?xml version="1.0" encoding="UTF-8"?>
<FieldServiceSettings xmlns="http://soap.sforce.com/2006/04/metadata">
  <fieldServiceNotificationsOrgPref>false</fieldServiceNotificationsOrgPref>
  <fieldServiceOrgPref>true</fieldServiceOrgPref>
  <serviceAppointmentsDueDateOffsetOrgValue>6</serviceAppointmentsDueDateOffsetOrgValue>

  <enableWorkOrders>true</enableWorkOrders>
```

```
<workOrderSearchFields>WorkOrderNumber</workOrderSearchFields>
<workOrderSearchFields>Status</workOrderSearchFields>
<workOrderSearchFields>Address</workOrderSearchFields>
<workOrderSearchFields>Subject</workOrderSearchFields>
<workOrderLineItemSearchFields>Subject</workOrderLineItemSearchFields>
</FieldServiceSettings>
```

Wildcard Support in the Manifest File

The wildcard character * (asterisk) in the `package.xml` manifest file doesn't apply to metadata types for feature settings. The wildcard applies only when retrieving all settings, not for an individual setting. For details, see [Settings](#). For information about using the manifest file, see [Deploying and Retrieving Metadata with the Zip File](#).

Skill

Represents the settings for a skill used for field service or to route chats to agents in Chat, such as the name of the skill and which agents the skills are assigned to.

This type extends the Metadata metadata type and inherits its `fullName` field.

File Suffix and Directory Location

Skill values are stored in the `<developer_name>.skill` file in the `skills` directory.

Version

Skill is available in API version 28.0 and later.

Fields

| Field Name | Field Type | Description |
|-------------|----------------------------------|---|
| assignments | SkillAssignments | Specifies how skills are assigned to Chat users. Skills can be assigned to sets of users or sets of profiles. |
| description | string | Specifies the description of the skill. This field is available in API version 38.0 and later. |
| label | string | Specifies the name of the skill. |

SkillAssignments

Represents which users and user profiles to whom specific skills are assigned.

Fields

| Field Name | Field Type | Description |
|------------|---|---|
| profiles | SkillProfileAssignments | Specifies the profiles that are associated with a specific skill. |
| users | SkillUserAssignments | Specifies the users that are associated with a specific skill. |

SkillProfileAssignments

Represents the profiles that are associated with a specific skill.

Fields

| Field Name | Field Type | Description |
|------------|------------|--|
| profile | string | Specifies the custom name of the profile associated with a specific skill. |

SkillUserAssignments

Represents the users that are associated with a specific skill.

Fields

| Field Name | Field Type | Description |
|------------|------------|--|
| user | string | Specifies the username of the user associated with a specific skill. |

Declarative Metadata Sample Definition

This is a sample of a `skill` file.

```
<?xml version="1.0" encoding="UTF-8"?>
<Skill xmlns="http://soap.sforce.com/2006/04/metadata">
  <label>My Skill 1</label>
  <assignments>
    <profiles>
      <profile>LiveAgentOperator</profile>
      <profile>LiveAgentSupervisor</profile>
    </profiles>
    <users>
      <user>jdoe@acme.com</user>
    </users>
  </assignments>
</Skill>
```

Wildcard Support in the Manifest File

This metadata type supports the wildcard character * (asterisk) in the `package.xml` manifest file. For information about using the manifest file, see [Deploying and Retrieving Metadata with the Zip File](#).

TimeSheetTemplate

Represents a template for creating time sheets in Field Service Lightning. This type extends the `Metadata` metadata type and inherits its `fullName` field.

File Suffix and Directory Location

`TimeSheetTemplate` components have the suffix `timeSheetTemplate` and are stored in the `timeSheetTemplates` folder.

Version

`TimeSheetTemplate` components are available in API version 46.0 and later.

Special Access Rules

Field Service Lightning must be enabled. Users must have the `Customize Application` and `Time Sheet Template` permissions.

Fields

| Field Name | Field Type | Description |
|---|--|---|
| <code>active</code> | boolean | Required. Indicates whether the time sheet template is active (<code>true</code>) or not (<code>false</code>). |
| <code>description</code> | string | The time sheet template's description. |
| <code>frequency</code> | <code>TimeSheetFrequency</code> (enumeration of type string) | Required. Defines the frequency of the time sheet creation period. One of the following values: <ul style="list-style-type: none">• <code>Daily</code>• <code>Weekly</code>• <code>EveryTwoWeeks</code>• <code>TwiceAMonth</code>• <code>Monthly</code> |
| <code>masterLabel</code> | string | Required. The name of the time sheet template. |
| <code>startDate</code> | date | Required. The date when the time sheet takes effect. |
| <code>timeSheetTemplateAssignments</code> | TimeSheetTemplateAssignment | A list of profiles that the template is assigned to. |
| <code>workWeekEndDay</code> | <code>DaysOfWeek</code> (enumeration of type string) | Required. The end day of the template's work week. One of the following values: <ul style="list-style-type: none">• <code>Monday</code>• <code>Tuesday</code> |

| Field Name | Field Type | Description |
|------------------|--|--|
| | | <ul style="list-style-type: none"> • Wednesday • Thursday • Friday • Saturday • Sunday |
| workWeekStartDay | DaysOfWeek (enumeration of type string) | Required. The start day of the template's work week. One of the following values: <ul style="list-style-type: none"> • Monday • Tuesday • Wednesday • Thursday • Friday • Saturday • Sunday |

TimeSheetTemplateAssignment

Returns a quick action that's associated with an EmbeddedServiceLiveAgent setup. The quick action includes the pre-chat form fields that the embedded chat window displays and shows the order in which the fields are displayed.

| Field Name | Field Type | Description |
|------------|------------|---|
| assignedTo | string | The IDs of the user profiles that a time sheet template is assigned to. |

Declarative Metadata Sample Definition

The following is an example of a TimeSheetTemplate file.

```
<?xml version="1.0" encoding="UTF-8"?>
<TimeSheetTemplate xmlns="http://soap.sforce.com/2006/04/metadata">
  <active>true</active>
  <description>Time Sheet Template description</description>
  <frequency>Daily</frequency>
  <masterLabel>label</masterLabel>
  <startDate>2018-10-18</startDate>
  <timeSheetTemplateAssignments>
    <assignedTo>admin</assignedTo>
  </timeSheetTemplateAssignments>
  <timeSheetTemplateAssignments>
    <assignedTo>standard</assignedTo>
  </timeSheetTemplateAssignments>
  <workWeekEndDay>Tuesday</workWeekEndDay>
  <workWeekStartDay>Monday</workWeekStartDay>
</TimeSheetTemplate>
```

The following is an example `package.xml` that references the previous definition.

```
<?xml version="1.0" encoding="UTF-8"?>
<Package xmlns="http://soap.sforce.com/2006/04/metadata">
  <types>
    <members>*</members>
    <name>TimeSheetTemplate</name>
  </types>
  <version>46.0</version>
</Package>
```

Wildcard Support in the Manifest File

This metadata type supports the wildcard character * (asterisk) in the `package.xml` manifest file. For information about using the manifest file, see [Deploying and Retrieving Metadata with the Zip File](#).

Field Service Lightning in the Tooling API

The following objects in the Tooling API are used in Field Service Lightning.

IN THIS SECTION:

[CleanRule](#)

Represents a data integration rule that controls how a data service adds and updates data for existing records in an org.

[TimeSheetTemplate](#)

Represents a template for creating time sheets in Field Service Lightning. Available in API version 46.0 and later.

CleanRule

Represents a data integration rule that controls how a data service adds and updates data for existing records in an org.

This object is available in API version 38.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

GET


Fields

| Field | Details |
|--------------------|--------------------------|
| CleanDataServiceId | Type reference |

| Field | Details |
|----------------------|--|
| | Properties Create, Filter, Group, Sort Description A foreign key reference to the CleanDataService that processes this CleanRule. |
| DataAssessmentStatus | Type picklist Properties Create, Defaulted on create, Filter, Group, Nillable Description The status of the data assessment. The following are valid values: <ul style="list-style-type: none"> • Hidden (default) • Not Started • In Progress • Pending Aggregation • Aggregation Complete • Failed Aggregation • Aborted This field is read only. |
| Description | Type textarea Properties Create, Filter, Group, Nillable, Sort, Update Description User-friendly text that describes the data integration rule. |
| DeveloperName | Type string Properties Create, Filter, Group, , Sort, Update Description 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 unique name prevents conflicts with rules from other packages that have the same MasterLabel. |
| IsBulkEnabled | Type boolean Properties Create, Defaulted on create, Filter, Group, Sort, Update |

| Field | Details |
|---------------------|--|
| | <p>Description</p> <p>If this flag is set to <code>true</code>, the system automatically applies the rule to existing records whenever the rule is updated or saved. If the flag is set to <code>false</code>, the system doesn't automatically apply the rule to existing records. You can always apply the rule manually.</p> |
| IsSilentSaveEnabled | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description</p> <p>If <code>false</code>, updates don't modify <code>LastModifiedDate</code> and <code>LastModifiedById</code> when it applies this rule; otherwise, updates insert the current date and the current user.</p> |
| Language | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description</p> <p>The language of the data integration rule. The following values are permitted:</p> <ul style="list-style-type: none"> 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. Swedish: <code>sv</code> Thai: <code>th</code> The Salesforce user interface is fully translated to Thai, but Help is in English. |

| Field | Details |
|----------------------|--|
| MatchConfidence | <p>Type double</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description Indicates how closely a Lightning Data record matches a Salesforce record. The higher the minimum value is set, the more precise the matches. This field is used in packages that support match scores for third-party data. Valid values include an integer determined by the data service provider. If the value is null, the default value from the data service provider is used. Available in API version 45.0 and later.</p> |
| MasterLabel | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description Master label for this object. This display value is the internal label that is not translated.</p> |
| MatchRule | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort</p> <p>Description An internal label for the matching rule in the data service that's associated with this CleanRule.</p> |
| ShouldBypassTriggers | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description If <code>true</code>, indicates that the system does not apply triggers when it applies this rule; otherwise, the system applies the triggers.</p> |
| ShouldBypassWorkflow | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description If <code>true</code>, the system bypasses workflow rules when it applies the data integration rule; otherwise, the system applies workflow rules.</p> |

| Field | Details |
|------------------|---|
| SubjectType | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort</p> <p>Description The standard or custom object in your org that's acted on by this CleanRule. The possible values are:</p> <ul style="list-style-type: none"> • Account • Address • Contact • CustomEntityDefinition • Lead • ResourceAbsence • ServiceAppointment • ServiceTerritory • ServiceTerritoryMember • WorkOrder • WorkOrderLineItem <p>In addition, custom objects with data integration rules are possible.</p> <p> Note: The standard objects are installed with default data integration rules, but only the default rules for account, contact, and lead can be modified.</p> |
| SourceObjectType | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description A data service object associated with this CleanRule. The set of picklist values includes all the object types defined in the data service. However, if you specify a non-existent object, the API call returns an error. If you enable the Salesforce data services, the following values appear.</p> <p>CustomEntityDefinition Information retrieved from an external source in the form of an external object to enrich an account, contact, or lead. We map the external object fields to the account, contact, and lead lookup and details.</p> <p>DataCloudAddress Geolocation data service. To learn more about this service, see Compound Field Considerations and Limitations.</p> <p>DatacloudDandBCompany Data.com data service. This service is only available in the Professional, Enterprise, Unlimited, and Performance Editions, and only with a Premium Clean license. Your</p> |

| Field | Details |
|--------|---|
| | <p>administrator must enable this data service by enabling the data integration rules for account and lead.</p> <p>If you install Marketplace packages that contain data services, their object names also appear in the set of picklist values.</p> |
| Status | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description Status of the data integration rule. Valid values are <code>Active</code> and <code>Inactive</code>.</p> |

TimeSheetTemplate

Represents a template for creating time sheets in Field Service Lightning. Available in API version 46.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

GET, POST, PATCH, DELETE

Special Access Rules

Field Service Lightning must be enabled to access TimeSheetTemplate. Users must have the Customize Application and Time Sheet Template permissions.

Limitations

SOQL Limitations

Fields

| Field | Details |
|--------|---|
| Active | <p>Type boolean</p> <p>Properties Defaulted On Create, Filter, Group, Sort</p> <p>Description Indicates whether the time sheet template is active (<code>true</code>) or not (<code>false</code>).</p> |

| Field | Details |
|---------------|---|
| Description | <p>Type textarea</p> <p>Properties Nillable</p> <p>Description The time sheet template's description.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The API name of the time sheet template. Can contain alphanumeric characters and underscores, and must begin with a letter.</p> |
| Frequency | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description Defines the frequency of the time sheet creation period. One of the following values:</p> <ul style="list-style-type: none"> • Daily • Weekly • EveryTwoWeeks • TwiceAMonth • Monthly |
| Fullname | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the associated metadata object in Metadata API. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> |

| Field | Details |
|-----------------|--|
| | Description The language associated with the time sheet template. |
| 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: <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged Available in API version 48.0 and later. |
| MasterLabel | Type string Properties Filter, Group, Sort Description The name of the time sheet template. |
| Metadata | Type mns:TimeSheetTemplate Properties Create, Nillable, Update Description The TimeSheetTemplate metadata. |
| NamespacePrefix | Type string Properties Filter, Group, Nillable, Sort Description The namespace that identifies the package that manages the time sheet template. Available in API version 48.0 and later. |

| Field | Details |
|------------------------------|---|
| StartDate | <p>Type date</p> <p>Properties Filter, Group, Sort</p> <p>Description The date when the time sheet takes effect.</p> |
| TimeSheetTemplateAssignments | <p>Type QueryResult</p> <p>Properties Nillable</p> <p>Description A list of profiles that the template is assigned to. This field is only visible when the template has been assigned to at least one user profile. Available in API version 48.0 and later.</p> |
| WorkWeekEndDay | <p>Type picklist</p> <p>Properties Defaulted On Create, Filter, Group, Restricted picklist, Sort</p> <p>Description The end day of the template's work week. One of the following values:</p> <ul style="list-style-type: none"> Monday Tuesday Wednesday Thursday Friday Saturday Sunday (default) |
| WorkWeekStartDay | <p>Type picklist</p> <p>Properties Defaulted On Create, Filter, Group, Restricted picklist, Sort</p> <p>Description The start day of the template's work week. One of the following values:</p> <ul style="list-style-type: none"> Monday Tuesday Wednesday Thursday Friday |

| Field | Details |
|-------|--|
| | <ul style="list-style-type: none"> • Saturday • Sunday (default) |

Field Service Lightning in the REST API

The following objects in the REST API are used in Field Service Lightning.

IN THIS SECTION:

[Field Service Flow](#)

Returns information corresponding to a field service flow. This resource is available in REST API version 42.0 and later.

[Field Service Mobile Settings](#)

Returns information about the Field Service Lightning mobile app settings assigned to the profile of the context user. This resource is available in REST API version 42.0 and later.

[Service Report Template](#)

Returns information corresponding to one or more service report templates in field service. This resource is available in REST API version 40.0 and later.

[SObject Suggested Articles](#)

Returns a list of suggested Salesforce Knowledge articles for a case, work order, or work order line item.

Field Service Flow

Returns information corresponding to a field service flow. This resource is available in REST API version 42.0 and later.

This resource accepts the API name of a flow definition and returns information about the active flow version. If no flow version is activated, the most recent version is returned. Flow elements can be translated to the language of the user invoking this API by using Translation Workbench. If a particular flow version's elements have been translated, the data returned uses the language of the query. To learn more, see [Flow Components in Translation Workbench](#).

This resource is available to API users with Field Service Lightning mobile app user permissions and the Run Flows user permission.

URI

`/services/data/vXX.X/support/fieldservice/Flow?developerNames=Flow Unique Name`

Formats

JSON, XML

HTTP Method

GET

Authentication

Authorization: Bearer **token**

Parameters


| Parameter | Description |
|----------------|--|
| developerNames | The unique name for the flow definition. Currently, you can specify only one unique name using this parameter. |

Response Body

The following table describes the main elements of the response body.

| Field | | | Type | Description |
|------------------|---------|-------------|------------------|---|
| Flows | | | Array | List of flows |
| CreatedDate | | | String | Date the flow was created |
| Description | | | String | Description of the flow |
| FullName | | | String | Full name for the flow |
| Id | | | String | Unique ID for the flow |
| LastModifiedDate | | | String | Date the flow was last modified |
| Metadata | | | | |
| | Choices | | Array | List of choices used by fields |
| | | ChoiceText | String | Text of choice |
| | | DataType | String | Data type of choice |
| | | Name | String | Name for the choice |
| | Screens | | Array of objects | List of screens for the flow |
| | | AllowBack | Boolean | Whether you can go back from the screen |
| | | AllowFinish | Boolean | Whether you can finish the flow from the screen |
| | | AllowPause | Boolean | Whether you can pause from the screen |
| | | Fields | Array of objects | List of fields used by the screen |
| | | HelpText | String | Help text for the screen |
| | | Label | String | Label for the screen |
| | | LocationX | Number | X coordinate for the screen |
| | | LocationY | Number | Y coordinate for the screen |
| | | Name | String | Name of the screen |
| ProcessType | | | String | Type of process for the flow; in this case, it should be “FieldServiceMobile” |

| Field | Type | Description |
|---------------|--------|-----------------------------|
| Status | String | Status of the flow |
| VersionNumber | Number | Version number for the flow |

 **Example:** This sample request uses the unique name “FS_Flow” for the flow definition.

The response contains two screens:

- Screen 1
- Screen 2

Screen 1 has two fields:

- Field 1: a text field
- RadioButton: a field with two choices

Screen 2 has one field:

- Field 2: a text field

Request

GET

/services/data/v42.0/support/fieldservice/Flow?developerNames=FS_Flow

Response

```
{
  "flows" : [ {
    "Id" : "301R000000008grIAA",
    "DefinitionId" : "300R00000004OLFIA2",
    "MasterLabel" : "FS_Flow",
    "ManageableState" : "unmanaged",
    "VersionNumber" : 1,
    "Status" : "Draft",
    "Description" : "FS Flow",
    "ProcessType" : "FieldServiceMobile",
    "CreateDate" : "2017-12-05T19:22:16.000+0000",
    "CreatedById" : "005R0000000J2glIAC",
    "LastModifiedDate" : "2017-12-05T19:22:16.000+0000",
    "LastModifiedById" : "005R0000000J2glIAC",
    "Metadata" : {
      "actionCalls" : null,
      "apexPluginCalls" : null,
      "assignments" : null,
      "choices" : [ {
        "choiceText" : "Choice A",
        "dataType" : "String",
        "description" : null,
        "name" : "Choice_A",
        "processMetadataValues" : null,
        "userInput" : null,
        "value" : null
      }, {
        "choiceText" : "Choice B",
```

```

        "dataType" : "String",
        "description" : null,
        "name" : "Choice_B",
        "processMetadataValues" : null,
        "userInput" : null,
        "value" : null
    } ],
    "constants" : null,
    "decisions" : null,
    "description" : "FS Flow",
    "dynamicChoiceSets" : null,
    "formulas" : null,
    "fullName" : "FS_Flow-1",
    "interviewLabel" : "FS_Flow {!$Flow.CurrentDateTime}",
    "label" : "FS Flow",
    "loops" : null,
    "module" : null,
    "processMetadataValues" : null,
    "processType" : "FieldServiceMobile",
    "recordCreates" : null,
    "recordDeletes" : null,
    "recordLookups" : null,
    "recordUpdates" : null,
    "screens" : [ {
        "allowBack" : true,
        "allowFinish" : true,
        "allowPause" : true,
        "connector" : {
            "processMetadataValues" : null,
            "targetReference" : "Screen_2"
        },
        "description" : null,
        "fields" : [ {
            "choiceReferences" : null,
            "dataType" : "String",
            "defaultSelectedChoiceReference" : null,
            "defaultValue" : null,
            "description" : null,
            "extensionName" : null,
            "fieldText" : "Field 1",
            "fieldType" : "InputField",
            "helpText" : "Help Text 1",
            "inputParameters" : [ ],
            "isRequired" : false,
            "isVisible" : null,
            "name" : "Field_1",
            "outputParameters" : [ ],
            "processMetadataValues" : null,
            "scale" : null,
            "validationRule" : null
        }, {
            "choiceReferences" : [ "Choice_A", "Choice_B" ],
            "dataType" : "String",
            "defaultSelectedChoiceReference" : null,

```

```

        "defaultValue" : null,
        "description" : null,
        "extensionName" : null,
        "fieldText" : "Pick a choice",
        "fieldType" : "RadioButtons",
        "helpText" : "Pick a Choice help text",
        "inputParameters" : [ ],
        "isRequired" : false,
        "isVisible" : null,
        "name" : "Pick_a_choice",
        "outputParameters" : [ ],
        "processMetadataValues" : null,
        "scale" : null,
        "validationRule" : null
    } ],
    "helpText" : null,
    "label" : "Screen 1",
    "locationX" : 189,
    "locationY" : 178,
    "name" : "Screen_1",
    "pausedText" : null,
    "processMetadataValues" : null,
    "rules" : null,
    "showFooter" : true,
    "showHeader" : true
}, {
    "allowBack" : true,
    "allowFinish" : true,
    "allowPause" : true,
    "connector" : null,
    "description" : null,
    "fields" : [ {
        "choiceReferences" : null,
        "dataType" : "String",
        "defaultSelectedChoiceReference" : null,
        "defaultValue" : null,
        "description" : null,
        "extensionName" : null,
        "fieldText" : "Field 1",
        "fieldType" : "InputField",
        "helpText" : null,
        "inputParameters" : [ ],
        "isRequired" : false,
        "isVisible" : null,
        "name" : "Field_1",
        "outputParameters" : [ ],
        "processMetadataValues" : null,
        "scale" : null,
        "validationRule" : null
    } ],
    "helpText" : null,
    "label" : "Screen 2",
    "locationX" : 437,
    "locationY" : 289,

```

```

        "name" : "Screen_2",
        "pausedText" : null,
        "processMetadataValues" : null,
        "rules" : null,
        "showFooter" : true,
        "showHeader" : true
      } ],
      "startElementReference" : "Screen_1",
      "steps" : null,
      "subflows" : null,
      "textTemplates" : null,
      "urls" : null,
      "variables" : null,
      "waits" : null
    },
    "FullName" : "FS_Flow-1"
  } ]
}

```

Field Service Mobile Settings

Returns information about the Field Service Lightning mobile app settings assigned to the profile of the context user. This resource is available in REST API version 42.0 and later.

The Field Service Lightning mobile app for Android and iOS comes with a variety of customizable settings, including branding colors, geolocation accuracy, app extensions, and date picker display. You can assign unique configurations of those settings to user profiles for a customized Field Service Lightning mobile experience. For example, configure separate settings to address the mobile needs of contractors, technicians of varying levels, and service crew leaders.

The `FieldServiceMobileSettings` object represents a configuration of the mobile app settings. The assignment of a settings configuration to a user profile is stored in a child object, `MobileSettingsAssignment`. A `FieldServiceMobileSettings` record can also have zero or more child `AppExtension` records. The `userSettings` extension enables the return of user profile settings information.

Each user profile can be associated with only one `FieldServiceMobileSettings` record. If a user's profile isn't explicitly assigned a settings record, the profile uses the default settings.

This resource returns information about the `FieldServiceMobileApp` settings assigned to the profile of the user in the context of which the call is made. It is available in orgs where Field Service Lightning is enabled, and can be used for users who have one or more of the following:

- Field Service Mobile permission set license
- View Setup user permission
- Customize Application user permission
- System Administrator profile

This resource can also be executed in the context of a community user with the Field Service Mobile permission set license.

URI

`/services/data/vXX.X/objects/FieldServiceMobileSettings/userSettings`

Formats

JSON, XML

HTTP Method

GET

Authentication

Authorization: Bearer *token*

Parameters

None.

Response Body

A FieldServiceMobileSettings record contains the following properties. All string properties have a maximum length of 7 characters unless otherwise noted. For descriptions, see [FieldServiceMobileSettings](#) in the SOAP API Developer Guide.

| Field | Type |
|--------------------------------|--|
| BgGeoLocationAccuracy | Enum Values: Medium, Coarse, VeryCoarse |
| BgGeoLocationMinUpdateFreqMins | Integer |
| BrandInvertedColor | String |
| ContrastInvertedColor | String |
| ContrastPrimaryColor | String |
| ContrastQuaternaryColor | String |
| ContrastQuinaryColor | String |
| ContrastSecondaryColor | String |
| ContrastTertiaryColor | String |
| DefaultListViewDeveloperName | String (maximum length: 255) |
| FeedbackPrimaryColor | String |
| FeedbackSecondaryColor | String |
| FeedbackSelectedColor | String |
| FutureDaysInDatePicker | Integer |
| GeoLocationAccuracy | Enum Values: Fine, Medium, Coarse |
| GeoLocationMinUpdateFreqMins | Integer |
| Id | String |
| IsAssignmentNotification | Boolean |
| IsDefault | Boolean |
| IsDispatchNotification | Boolean |
| IsSendLocationHistory | Boolean |

| Field | Type |
|------------------------------|--------------------------------------|
| IsShowEditFullRecord | Boolean |
| IsUseSalesforceMobileActions | Boolean |
| MetadataCacheTimeDays | Integer |
| NavbarBackgroundColor | String |
| NavbarInvertedColor | String |
| PastDaysInDatePicker | Integer |
| PrimaryBrandColor | String |
| RecordDataCacheTimeMins | Integer |
| SecondaryBrandColor | String |
| TimeIntervalSetupMins | Enum Values: 1, 5, 15, 20, 30, 60 |
| UpdateScheduleTimeMins | Integer |

If any of the following is true, an error message is returned:

- The user does not have access to FieldServiceMobileSettings
- Field Service Lightning is not enabled in the org
- An internal server error occurs



Example:

Request

GET

/services/data/v46.0/subjects/FieldServiceMobileSettings/userSettings

Response

```
{
  "attributes" : {
    "type" : "FieldServiceMobileSettings",
    "url" :
"/services/data/v46.0/subjects/FieldServiceMobileSettings/0MfRM0000000rpR0AQ"
  },
  "Id" : "0MfRM0000000rpR0AQ",
  "IsDeleted" : false,
  "DeveloperName" : "Field_Service_Mobile_Settings",
  "Language" : "en_US",
  "MasterLabel" : "Field Service Mobile Settings",
  "CreatedDate" : "2019-02-17T05:20:47.000+0000",
  "CreatedById" : "005RM000001hTsLYAU",
  "LastModifiedDate" : "2019-03-22T22:48:17.000+0000",
  "LastModifiedById" : "005RM000001k2kpYAA",
  "SystemModstamp" : "2019-03-22T22:48:17.000+0000",
}
```



```

"NavbarBackgroundColor" : "#803ABE",
"BrandInvertedColor" : "#FFFFFF",
"FeedbackPrimaryColor" : "#C23934",
"FeedbackSecondaryColor" : "#13C4A3",
"PrimaryBrandColor" : "#803ABE",
"SecondaryBrandColor" : "#2A7AB0",
"ContrastPrimaryColor" : "#000000",
"ContrastSecondaryColor" : "#444444",
"ContrastTertiaryColor" : "#9FAAB5",
"ContrastQuaternaryColor" : "#E6E6EB",
"ContrastQuinaryColor" : "#EEEEEE",
"ContrastInvertedColor" : "#FFFFFF",
"IsSendLocationHistory" : false,
"GeoLocationMinUpdateFreqMins" : 10,
"GeoLocationAccuracy" : "Medium",
"RecordDataCacheTimeMins" : 240,
"MetadataCacheTimeDays" : 7,
"UpdateScheduleTimeMins" : 30,
"IsShowEditFullRecord" : false,
"TimeIntervalSetupMins" : "15",
"DefaultListViewDeveloperName" : null,
"NavbarInvertedColor" : "#FFFFFF",
"FeedbackSelectedColor" : "#FFFFFF",
"FutureDaysInDatePicker" : 45,
"PastDaysInDatePicker" : 45,
"IsDefault" : true,
"BgGeoLocationMinUpdateFreqMins" : 60,
"BgGeoLocationAccuracy" : "Coarse",
"IsUseSalesforceMobileActions" : false,
"IsAssignmentNotification" : false,
"IsDispatchNotification" : true
}

```

Service Report Template

Returns information corresponding to one or more service report templates in field service. This resource is available in REST API version 40.0 and later.

This resource allows users to input one or more service report template IDs, and responds with information about the templates. Service reports can be generated for work orders, work order line items, and service appointments.

ServiceReportTemplate is available to API users in orgs where Field Service Lightning is enabled. It is also enabled for communities.

URI

/services/data/vXX.X/support/fieldservice/ServiceReportTemplate

Formats

JSON

HTTP Method

GET

Authentication

Authorization: Bearer *token*

Parameters

| Parameter | Description |
|----------------------------|--|
| <code>templateIds</code> | The list of service report template IDs, provided as comma-separated string values. The API response shows a failure if any template ID is invalid. |
| <code>showDefault</code> | A boolean parameter indicating whether the default service report template is returned in the response. If <code>true</code> , the default template is included; if <code>false</code> (default), the default template is not included. For example, if a request lists the IDs of two non-default templates and <code>showDefault=true</code> , the response will include information for three templates. |
| <code>templateTypes</code> | The type of record that the report template can be used for: ServiceAppointment, WorkOrder, or WorkOrderLineItem. Service report templates include four customizable sub-templates: <ul style="list-style-type: none"> • <code>WO</code>—Work Order • <code>WOLI</code>—Work Order Line Item • <code>WO_SA</code>—Service Appointment for Work Order • <code>WOLI_SA</code>—Service Appointment for Work Order Line Item |

Response Body

A service report has three main areas which cannot be deleted: **Header**, **Body** and **Footer**. Each area must contain at least one component—a **section**, **related list**, or **signature**—though the component can be empty. The Header and Footer come with a predefined section, and additional components cannot be added to them. The Body can contain one or more of each component.

Section components have the following properties:

- `title`: String
- `hideTitle`: Boolean
- `hideFieldLabels`: Boolean
- `columns`: Enum {1, 2}
- `rightAlignment`: Enum {true,false}
- `fields`: Array of {Field}

A **field** can be added to a section, related list, or signature. Columns in related lists are transformed into fields in the API. Field components have the following properties:

- `fieldType`: Enum {rta, entityField, blank}
- `Attributes`:
 - If the field type is `rta`, the field also contains `{ "richTextValue" : "<html value>" }`
 - If the field type is `entityField`, the field also contains `{ "entityName" : "<WorkOrder>", "fieldName" : "Account" }`
 - If the field type is `blank`, no other information is required
- `Position`:
 - `row`

— column

Related list components have the following properties:

- title: String
- hideTitle: Boolean
- entityName: String
- relatedListName: String
- relatedEntityName: String
- fields: Array of {Field Name (String), Column Position (Integer)}

Signature components have the following properties:

- title: String
- hideTitle: Boolean
- hideFieldLabels: Boolean
- columns: Enum {1, 2}
- rightAlignment: Enum {true,false}
- signatureType: Dynamic Enum {<technician 1>, <dispatcher 1>}
- fields: Array of {Field Name (String), Position (Row,Column)}



Example: This sample request uses two service report template IDs.

Request

```
GET
/services/data/v42.0/support/fieldservice/ServiceReportTemplate?templateIds=0SLxx0000000ABC,
0SLR000000001QtOAI&showDefault=false&templateTypes=ServiceAppointment
```

Response

```
{
  "serviceReportTemplates": [
    {
      "defaultTemplate": false,
      "error": {
        "errorCode": "INVALID_TEMPLATE_ID",
        "errorMessage": "The Service Report Template ID is invalid."
      },
      "subTemplates": [],
      "templateId": "0SLxx0000000ABC"
    },
    {
      "defaultTemplate": false,
      "error": null,
      "subTemplates": [
        {
          "regions": [
            {
              "sections": [
                {
                  "columns": 2,
                  "hideFieldLabels": false,
```

```

        "hideTitle": false,
        "items": [
            {
                "position": {
                    "column": 0,
                    "row": 0
                },
                "richText": "<img alt=\"User-added image\"
src=\"https://c.mobile1.content.t.force.com/servlet/rtImage?eid=02R0000000008cZ&ap;feid=Data&ap;refid=02R000000000000000\"></img>",
                "type": "rta"
            },
            {
                "position": {
                    "column": 1,
                    "row": 0
                },
                "richText": "<u><i>Salesforce.com</i></u>",
                "type": "rta"
            }
        ],
        "position": 0,
        "rightAlign": false,
        "title": "Service Report",
        "type": "section"
    }
],
"type": "HEADER"
},
{
    "sections": [
        {
            "columns": 2,
            "hideFieldLabels": false,
            "hideTitle": true,
            "items": [],
            "position": 0,
            "rightAlign": false,
            "showPageNumber": false,
            "title": "Footer Section",
            "type": "section"
        }
    ],
    "type": "FOOTER"
},
{
    "sections": [
        {
            "columns": 2,
            "hideFieldLabels": false,
            "hideTitle": false,
            "items": [
                {
                    "entityName": "ServiceAppointment",

```

```

        "label": "Account",
        "name": "AccountId",
        "position": {
            "column": 0,
            "row": 0
        },
        "type": "entityField"
    },
    ...
    {
        "position": {
            "column": 1,
            "row": 0
        },
        "richText": "Prepared By:",
        "type": "rta"
    }
],
"position": 0,
"rightAlign": false,
"title": "Account & Contact Information",
"type": "section"
},
{
    "entityName": "WorkOrder",
    "filterCriteria": {
        "conditions": [
            {
                "field": "Status",
                "operation": "includes",
                "position": 0,
                "values": [
                    "In Progress",
                    "Completed"
                ]
            }
        ]
    }
},
"hideTitle": false,
"items": [
    {
        "column": 0,
        "label": "Work Order Line Item Number",
        "name": "LineItemNumber"
    },
    ...
    {
        "column": 6,
        "label": "Unit Price",
        "name": "UnitPrice"
    }
],
"position": 5,
"relatedEntityName": "WorkOrderLineItem",

```

```

        "relatedListName": "WorkOrderLineItems",
        "title": "Work Order Line Items",
        "type": "relatedList"
    },
    {
        "columns": 1,
        "hideFieldLabels": false,
        "hideTitle": false,
        "items": [
            {
                "entityName": "DigitalSignature",
                "label": "Signature",
                "name": "Document",
                "position": {
                    "column": 0,
                    "row": 0
                },
                "type": "entityField"
            },
            {
                "entityName": "DigitalSignature",
                "label": "Signed By",
                "name": "SignedBy",
                "position": {
                    "column": 0,
                    "row": 1
                },
                "type": "entityField"
            },
            {
                "entityName": "DigitalSignature",
                "label": "Date",
                "name": "SignedDate",
                "position": {
                    "column": 0,
                    "row": 2
                },
                "type": "entityField"
            }
        ],
        "position": 9,
        "rightAlign": false,
        "signatureType": "Default",
        "signatureTypeLabel": "Default",
        "title": "Customer Signature",
        "type": "signature"
    }
],
"type": "BODY"
}
],
"subTemplateType": "WO_SA"
},
{

```

```

        ...
        "subTemplateType": "WOLI_SA"
      }
    ],
    "templateId": "0SLR000000001QtOAI"
  }
]
}

```

SObject Suggested Articles

Returns a list of suggested Salesforce Knowledge articles for a case, work order, or work order line item.

Syntax

URI

To return suggested articles for a case, work order, or work order line item that is being created, use

`vXX.X/objects/SObject/suggestedArticles?language=article`

language&subject=***subject***&description=***description***. The ***SObject*** can be Case, WorkOrder, or WorkOrderLineItem. Suggestions are based on common keywords in the title, description, and other information that's entered before the record has been saved and assigned an ID.

For example: `vXX.X/objects/Case/suggestedArticles?language=article`

language&subject=***subject***&description=***description*** or

`vXX.X/objects/WorkOrder/suggestedArticles?language=article`

language&subject=***subject***&description=***description***.

To return suggested articles for an existing record with an ID, use

`vXX.X/objects/SObject/ID/suggestedArticles?language=article language`

Available since release

30.0

Formats

JSON, XML

HTTP methods

GET

Authentication

Authorization: Bearer ***token***

Request body

None required

Request parameters

| Parameter | Description |
|--------------|---|
| articleTypes | Optional. Three-character ID prefixes indicating the desired article types. You can specify multiple values for this parameter in a single REST call, by repeating the parameter name for each value. For example, <code>articleTypes=ka0&articleTypes=ka1</code> . |

| Parameter | Description |
|------------------|--|
| categories | <p>Optional. The name of the data category group and the data category API name (not category title) for desired articles. The syntax is <code>categories={ "Group": "Category" }</code>. Characters in the URL might need to be encoded. For example:</p> <pre>categories=%7B%22Regions%22%3A%22Asia%22%2C%22Products%22%3A%22Laptops%22%7D</pre> <p>The same data category group can't be specified more than once. However, you can specify multiple data category group and data category pairs. For example, <code>categories={ "Regions": "Asia", "Products": "Laptops" } .</code></p> |
| description | Text of the description. Valid only for new records without an existing ID and required if <code>subject</code> is null. Article suggestions are based on common keywords in the subject, description, or both. |
| language | Required. Language that the article is written in. |
| limit | Optional. Specifies the maximum number of suggested articles to return. |
| publishStatus | <p>Optional. The article's publication status. Valid values:</p> <ul style="list-style-type: none"> • Draft—Not published • Online—Published in Salesforce Knowledge • Archived |
| subject | Text of the subject. Valid only for new records without an existing ID and required if <code>description</code> is null. Article suggestions are based on common keywords in the subject, description, or both. |
| topics | Optional. The topic of returned articles. For example: <code>topics=outlook&topics=email</code> . |
| validationStatus | Optional. The validation status of returned articles. |

Example for getting suggested articles for a case that's being created

```
curl
https://yourInstance.salesforce.com/services/data/v30.0/subjects/Case/suggestedArticles?
language=en_US&subject=orange+banana&articleTypes=ka0&articleTypes=ka1
-H "Authorization: Bearer token"
```

Example JSON response body

```
[ {
  "attributes" : {
    "type" : "KnowledgeArticleVersion",
    "url" : "/services/data/v30.0/subjects/KnowledgeArticleVersion/ka0D00000004CcQ"
  }, {
    "Id" : "ka0D00000004CcQ"
  }, {
```



```
"attributes" : {  
  "type" : "KnowledgeArticleVersion",  
  "url" : "/services/data/v30.0/subjects/KnowledgeArticleVersion/ka0D00000004CXo"  
},  
"Id" : "ka0D00000004CXo"  
} ]
```

Usage

Salesforce Knowledge must be enabled in your organization. The user must have the “View Articles” permission enabled. The articles suggested include only the articles the user can access, based on the data categories and article types the user has permissions to view.

Articles are suggested based on a relevance algorithm. The `suggestedArticles` resource is designed to get the IDs of articles relevant to a case, work order, or work order line item. It’s intended to be used with other services that then use the IDs to get article data for display.

Field Service Lightning Managed Package

The Field Service Lightning managed package provides the FSL namespace, whose custom objects you can use to extend managed package features programmatically.

IN THIS SECTION:

[FSL Namespace](#)

The Field Service Lightning (FSL) namespace contains all classes, methods, Visualforce pages, and custom objects within the Field Service Lightning managed package. To allow access to namespace elements, assign the FSL custom permission set that's appropriate for the user's persona. For example, to allow a user to book appointments, assign the FSL Agent custom permission set.

SEE ALSO:

[Install the Field Service Lightning Managed Package](#)

FSL Namespace

The Field Service Lightning (FSL) namespace contains all classes, methods, Visualforce pages, and custom objects within the Field Service Lightning managed package. To allow access to namespace elements, assign the FSL custom permission set that's appropriate for the user's persona. For example, to allow a user to book appointments, assign the FSL Agent custom permission set.

IN THIS SECTION:

[AdvancedGapMatrix Class](#)

Represents a matrix of service resource IDs and graded time slots. An instance of this class is used only within the context of the results returned by the `GradeSlotsService` class.

[AppointmentBookingService Class](#)

Represents the appointment booking scheduling process in field service. Appointment booking returns the available slots for a service appointment, while considering scheduling policies, work rules, and service objectives. For example, we can schedule an appointment tomorrow between 9 and 11 AM, or next Monday between 4 and 6 PM.

[AppointmentBookingSlot Class](#)

Represents a booking slot available for a given service appointment. An instance of this class is part of the results returned by the `AppointmentBookingService` and `GradeSlotsService` classes.

[GradeSlotsService Class](#)

Represents the results shown in the Candidates quick action. Use the `GradeSlotsService` class to evaluate all possible slots where a given service appointment can be scheduled.

[OAAS Class](#)

Contains all the methods used in the available optimization services, such as global or in-day optimizations, reshuffle operations, and resource schedule optimizations.

[OAASRequest Class](#)

Represents the request sent in the `OAAS.Optimize()` method. This class contains all the details of a global optimization call.

[PolygonUtils Class](#)

Represents the result of using the `getTerritoryIdByPolygons` method to return a service territory record ID using latitude and longitude geolocation values. It also returns the map polygon record that the geocoded location is located in.

[ResourceScheduleData Class](#)

Contains all the details of a service resource's available slots for a given service appointment. An instance of this class is used only within the context of the results returned by the `AdvancedGapMatrix` class.

[ScheduleResult Class](#)

Represents the result of scheduling a service appointment that is returned by the `ScheduleService.schedule` method.

[ScheduleService Class](#)

Represents the scheduling of a given service appointment in the best available slot based on the applied scheduling policy.

[SchedulingOption Class](#)

Provides the details of an individual slot available for scheduling. Represents a run-time object used within the context of the results returned in the `AdvancedGapMatrix` class.

[TimeInterval Class](#)

Holds an interval's start and end times. An instance of this class is used when capturing the start and end times of a scheduling horizon, during which a scheduling process runs. It considers scheduled jobs and is also used to represent the start and end times of an appointment slot or window.

AdvancedGapMatrix Class

Represents a matrix of service resource IDs and graded time slots. An instance of this class is used only within the context of the results returned by the `GradeSlotsService` class.

Namespace

[FSL](#)

Example

For an example of how to parse the class results, see [GradeSlotsService Class](#).

IN THIS SECTION:

[AdvancedGapMatrix Properties](#)

AdvancedGapMatrix Properties

`AdvancedGapMatrix` contains the following properties.

IN THIS SECTION:

[FSLOperationId](#)

Populated only when scheduling a chain of two service appointments with scheduling dependencies, also known as complex work. An asynchronous call is made to schedule both service appointments in the chain. This property contains the `FSL__FSL_Operation__c` ID.

[partialResults](#)

Relevant only when Limit Apex Operations is enabled in the Field Service Admin app. If the processing time of the `ScheduleService` is about to exceed the maximum CPU limits, it returns the results that were already calculated and halts the process. This list contains the details of the partial, processed results. All other parameters are the same.

[resourceIDToScheduleData](#)

A map that returns service resource IDs and their corresponding available slots stored in the `ResourceScheduleData` class.

[Service](#)

The service appointment for which the `AdvancedGapMatrix` was run.

FSLOperationId

Populated only when scheduling a chain of two service appointments with scheduling dependencies, also known as complex work. An asynchronous call is made to schedule both service appointments in the chain. This property contains the `FSL__FSL_Operation__c` ID.

Signature

```
public Id FSLOperationId {get; set;}
```

Property Value

Type: [Id](#)

Usage

To learn more about the complex work feature, see [Create Scheduling Dependencies Between Service Appointments](#).

partialResults

Relevant only when Limit Apex Operations is enabled in the Field Service Admin app. If the processing time of the `ScheduleService` is about to exceed the maximum CPU limits, it returns the results that were already calculated and halts the process. This list contains the details of the partial, processed results. All other parameters are the same.

Signature

```
public List<FSL.PartialResultsInfo> partialResults {get; set;}
```

Property Value

Type: [List<FSL.PartialResultsInfo>](#)

resourceIDToScheduleData

A map that returns service resource IDs and their corresponding available slots stored in the `ResourceScheduleData` class.

Signature

```
public Map<Id, FSL.ResourceScheduleData> resourceIDToScheduleData {get; set;}
```

Property Value

Type: [Map<Id, FSL.ResourceScheduleData>](#)

Service

The service appointment for which the `AdvancedGapMatrix` was run.

Signature

```
public Service {get; set;}
```

Property Value

Type: `ServiceAppointment`

AppointmentBookingService Class

Represents the appointment booking scheduling process in field service. Appointment booking returns the available slots for a service appointment, while considering scheduling policies, work rules, and service objectives. For example, we can schedule an appointment tomorrow between 9 and 11 AM, or next Monday between 4 and 6 PM.

Namespace

[FSL](#)

Usage

Before calling the `AppointmentBookingService` class, make sure that the parent work order and service appointment already exist.

The time zone is typically based on the location of the customer requesting the service. As a best practice, use the time zone specified on the service territory's operating hours.

If you want to return time slots ordered by grade or by date, use the `getSlots()` method that accepts a sort parameter; either `sortResultsBy` or `sortBy`.

When the `AppointmentBookingService` class is called, the `ExactAppointment` value on the associated work type is ignored. If exact appointments are needed, set this value to `true` in the parameters. If you want to respect the `ExactAppointment` of the work type, query it directly from the work type.

After receiving the slots, the developer can decide how to display, or manage, the slots. Typically, the slots are displayed to the customer, who selects a slot. After a slot is selected, the service appointment's `ArrivalWindowStartTime` and `ArrivalWindowEndTime` fields are updated with the slot's start and end times; for example:

```
FSL.AppointmentBookingSlot slot = slots[0];
sa.ArrivalWindowStartTime = slot.Interval.Start.addSeconds(tz.getOffset(slot.Interval.Start)
    / -1000);
sa.ArrivalWindowEndTime = slot.Interval.Finish.addSeconds(tz.getOffset(slot.Interval.Finish)
    / -1000);

update sa;
```

The `FSL.ScheduleService` method is then called so that the service appointment is scheduled correctly within the selected slot.

IN THIS SECTION:

[AppointmentBookingService Methods](#)

AppointmentBookingService Methods

`AppointmentBookingService` includes the following static methods.

IN THIS SECTION:

[getSlots\(serviceID, policyId, operatingHoursId, tz, exactAppointment\)](#)

Returns a list of `FSL.AppointmentBookingSlot` records.

[getSlots\(serviceID, policyId, calendar, tz, exactAppointment\)](#)

Returns a list of `FSL.AppointmentBookingSlot` records.

[getSlots\(serviceID, policyId, calendar, tz, sortResults, exactAppointment\)](#)

Returns a sorted list of `FSL.AppointmentBookingSlot` records.

[getSlots\(serviceID, policyId, calendar, tz, sortBy, exactAppointment\)](#)

Returns a sorted list of `FSL.AppointmentBookingSlot` records.

[getABSlots\(serviceID, policyId, calendar, tz, sortBy, exactAppointment\)](#)

Returns a list of `FSL.AppointmentBookingSlot` records that respect complex work dependencies for a chain of two service appointments.

getSlots(serviceID, policyId, operatingHoursId, tz, exactAppointment)

Returns a list of `FSL.AppointmentBookingSlot` records.

Signature

```
public static List<FSL.AppointmentBookingSlot> getSlots(Id serviceID, Id policyId, Id
operatingHoursId, System.TimeZone tz, Boolean exactAppointment)
```

Parameters

serviceID

Type: `Id`

Required. The ID of the service appointment being scheduled.

policyId

Type: [Id](#)

Required. The ID of the scheduling policy being used.

operatingHoursId

Type: [Id](#)

Required. The ID of the operating hours record used to determine time slot intervals.



Note: The *TimeZone* on the operating hours record is ignored.

tz

Type: [System.TimeZone](#)

Required. The time zone in which the slots are returned. This time zone is normally the time zone of the service territory in which the service appointment is performed—in other words, the customer's location. Appointment booking slots must be displayed in the time zone of the customer's location.

exactAppointment

Type: [Boolean](#)

Required. Specifies whether the result uses exact appointments or an arrival window. When the `getSlots()` method is called, the *exactAppointment* value on the work type is ignored.

Return Value

Type: [List<FSL.AppointmentBookingSlot>](#)

Usage

This method returns a list of appointment booking time slots available for a given service appointment. Results are returned in the time zone sent in the original request.

Appointment windows depend on the *operatingHoursId* value provided in the call. The *operatingHoursId* represents various slots offered to the customer during appointment booking (for example, Mondays 9–11 AM, 11 AM–1 PM, 1–3 PM; Tuesdays 9–11 AM, 12–4 PM; and so forth.)

This method only returns available slots and does not schedule the service appointment. After the end user selects the desired slot, update the *ArrivalWindowStartTime* and *ArrivalWindowEndTime* properties on the service appointment and call the [FSL.ScheduleService](#) method.

Perform a time zone conversion to convert `dateTime` values to UTC before they are updated in the database.

Example

This example calls the `AppointmentBookingService` class using the Customer First scheduling policy and the Gold Appointments Calendar operating hours as the desired appointment slots.

```
// FSL.AppointmentBookingService
// The getSlots method returns a list of AppointmentBookingSlot objects.

ServiceAppointment sa = [SELECT Id, EarliestStartTime, DueDate FROM ServiceAppointment
                          WHERE Id='07r3F0000009dTSGEC'];
Id schedulingPolicyId = [SELECT Id FROM FSL__Scheduling_Policy__c
                          WHERE Name='Customer first' LIMIT 1].Id;
```

```

Id operatingHoursId    = [SELECT id FROM OperatingHours
                          WHERE name='Gold Appointments Calendar' LIMIT 1].Id;
Timezone tz = UserInfo.getTimeZone();

List<FSL.AppointmentBookingSlot> slots = FSL.AppointmentBookingService.GetSlots(sa.Id,
schedulingPolicyId, operatingHoursId, tz, false);

System.debug('Returned ' + slots.size() + ' appointment slots');
for(integer i=0; i<slots.size(); i++){
    system.debug('Slot:'+i+' Start: '+slots[i].Interval.Start+' Finish:'+
slots[i].Interval.Finish+' Grade: '+slots[i].Grade);
}

```

getSlots(serviceID, policyId, calendar, tz, exactAppointment)

Returns a list of `FSL.AppointmentBookingSlot` records.

Signature

```

public static List<FSL.AppointmentBookingSlot> getSlots(Id serviceID, Id policyId,
OperatingHours calendar, System.TimeZone tz, Boolean exactAppointment)

```

Parameters

serviceID

Type: `Id`

Required. The ID of the service appointment being scheduled.

policyId

Type: `Id`

Required. The ID of the scheduling policy being used.

calendar

Type: `OperatingHours` object

Required. The *calendar* is used to determine time slot intervals.



Note: The *TimeZone* on the operating hours record is ignored.

tz

Type: `System.TimeZone`

Required. The time zone in which the slots are returned. This time zone is normally the time zone of the service territory in which the service appointment is performed—in other words, the customer's location. Appointment booking slots must be displayed in the time zone of the customer's location.

exactAppointment

Type: `Boolean`

Required. Specifies whether the result uses exact appointments or an arrival window. When the `getSlots()` method is called, the *exactAppointment* value on the work type is ignored.

Return Value

Type: [List<FSL.AppointmentBookingSlot>](#)

Usage

This method returns a list of appointment booking time slots for a given service appointment. Results are returned in the time zone sent in the original request. The appointment windows (9–11, 11–1, 1–3, and so on) depend on slots returned in a subquery of the *OperatingHours* object.

This method only returns available slots and does not schedule the service appointment. Update the *ArrivalWindowStartTime* and *ArrivalWindowEndTime* properties on the service appointment and call the [FSL.ScheduleService](#) method.

Perform a time zone conversion to convert *dateTime* values to UTC before they are updated in the database.

Example

This example shows the use of a subquery to retrieve time slots from *calendar*, an *OperatingHours* object.

```
// FSL.AppointmentBookingService
// The getSlots method returns a list of AppointmentBookingSlot objects.

ServiceAppointment sa = [SELECT Id, EarliestStartTime, DueDate FROM ServiceAppointment
                          WHERE Id='08p4F0000008sRMQAY'];
Id schedulingPolicyId = [SELECT Id FROM FSL__Scheduling_Policy__c
                          WHERE Name='Customer First' LIMIT 1].Id;
operatinghours oh = new operatinghours();
oh = [SELECT id, (SELECT EndTime, StartTime, Type, DayOfWeek FROM TimeSlots) FROM
      OperatingHours
      WHERE name='AB Slot: 2 Hour Slots' LIMIT 1];
Timezone tz = UserInfo.getTimeZone();

List<FSL.AppointmentBookingSlot> slots = FSL.AppointmentBookingService.GetSlots(sa.Id,
schedulingPolicyId, oh, tz, false);

System.debug('Returned ' + slots.size() + ' appointment slots');
for(integer i=0; i<slots.size(); i++){
    system.debug('Slot:' + i + ' Start: ' + slots[i].Interval.Start + ' Finish: ' +
slots[i].Interval.Finish + ' Grade: ' + slots[i].Grade);
}
```

getSlots(serviceID, policyId, calendar, tz, sortResults, exactAppointment)

Returns a sorted list of *FSL.AppointmentBookingSlot* records.

Signature

```
public static List<FSL.AppointmentBookingSlot> getSlots(Id serviceID, Id policyId,
OperatingHours calendar, System.TimeZone tz, FSL.AppointmentBookingService.SortResultsBy
sortResults, Boolean exactAppointment)
```


Parameters

*serviceID*Type: [Id](#)

Required. The ID of the service appointment being scheduled.

*policyId*Type: [Id](#)

Required. The ID of the scheduling policy being used.

*calendar*Type: [OperatingHours](#) objectRequired. The *calendar* is used to determine time slot intervals.**Note:** The *TimeZone* on the operating hours record is ignored.*tz*Type: [System.TimeZone](#)

Required. The time zone in which the slots are returned. This time zone is normally the time zone of the service territory in which the service appointment is performed—in other words, the customer's location. Appointment booking slots must be displayed in the time zone of the customer's location.

*sortResults*Type: *FSL.AppointmentBookingService.SortResultsBy* enumeration

Required. Used to sort AppointmentBookingSlot results that are returned. Possible sort values are Grade, NoSort, and SlotDateTime.

*exactAppointment*Type: [Boolean](#)Required. Specifies whether the result uses exact appointments or an arrival window. When the *getSlots()* method is called, the *exactAppointment* value on the work type is ignored.

Return Value

Type: [List<FSL.AppointmentBookingSlot>](#)

Usage

This method returns a sorted list of appointment booking time slots for a given service appointment. Results are returned in the time zone sent in the original request. The appointment windows (9–11, 11–1, 1–3, and so on) depend on slots returned in a subquery of *calendar*, an *OperatingHours* object.

This method only returns available slots and doesn't schedule the service appointment. Update the *ArrivalWindowStartTime* and *ArrivalWindowEndTime* properties on the service appointment and call the [FSL.ScheduleService](#) method.

Perform a time zone conversion to convert *dateTime* values to UTC before they are updated in the database.

Example

This example sorts the returned slots by grade. When using a signature that contains a *calendar* parameter, use a subquery for time slots in the *OperatingHours* object.

```
// FSL.AppointmentBookingService
// The getSlots method returns a list of AppointmentBookingSlot objects.
```

```

ServiceAppointment sa = [SELECT Id, EarliestStartTime, DueDate FROM ServiceAppointment
                          WHERE Id='08p4F0000008sRMQAY'];
Id schedulingPolicyId = [SELECT Id FROM FSL__Scheduling_Policy__c
                          WHERE Name='Customer First' LIMIT 1].Id;
operatinghours oh = new operatinghours();
oh = [SELECT id, (SELECT EndTime, StartTime, Type, DayOfWeek FROM TimeSlots) FROM
      OperatingHours
      WHERE name='AB Slot: 2 Hour Slots' LIMIT 1];
Timezone tz = UserInfo.getTimeZone();

FSL.AppointmentBookingService.SortResultsBy sortResults =
FSL.AppointmentBookingService.SortResultsBy.Grade;
List<FSL.AppointmentBookingSlot> slots = FSL.AppointmentBookingService.GetSlots(sa.Id,
schedulingPolicyId, oh, tz, sortResults, false);

System.debug('Returned ' + slots.size() + ' appointment slots');
for(integer i=0; i<slots.size(); i++){
    system.debug('Slot:' + i + ' Start: ' + slots[i].Interval.Start + ' Finish: ' +
slots[i].Interval.Finish + ' Grade: ' + slots[i].Grade);
}

```

getSlots(serviceID, policyId, calendar, tz, sortBy, exactAppointment)

Returns a sorted list of `FSL.AppointmentBookingSlot` records.

Signature

```

public static List<FSL.AppointmentBookingSlot> getSlots(Id serviceID, Id policyId,
OperatingHours calendar, System.TimeZone tz, String sortBy, Boolean exactAppointment)

```

Parameters

serviceID

Type: `Id`

Required. The ID of the service appointment being scheduled.

policyId

Type: `Id`

Required. The ID of the scheduling policy being used.

calendar

Type: `OperatingHours` object

Required. The *calendar* is used to determine time slot intervals.



Note: The *TimeZone* on the operating hours record is ignored.

tz

Type: `System.TimeZone`

Required. The time zone in which the slots are returned. This time zone is normally the time zone of the service territory in which the service appointment is performed—in other words, the customer's location. Appointment booking slots must be displayed in the time zone of the customer's location.

sortBy

Type: [String](#)

Required. Used to sort AppointmentBookingSlot results. Acceptable values are SORT_BY_GRADE, SORT_BY_DATE, and SORT_BY_NO_SORT.

exactAppointment

Type: [Boolean](#)

Required. Specifies whether the result uses exact appointments or an arrival window. When the `getSlots()` method is called, the *exactAppointment* value on the work type is ignored.

Return Value

Type: [List<FSL.AppointmentBookingSlot>](#)

Usage

This method returns a sorted list of appointment booking time slots for a given service appointment. Results are returned in the time zone sent in the original request. The appointment windows (9–11, 11–1, 1–3, and so on) depend on slots returned in a subquery of *calendar*, an *OperatingHours* object.

This method only returns available slots and doesn't schedule the service appointment. Update the *ArrivalWindowStartTime* and *ArrivalWindowEndTime* properties on the service appointment and call the [FSL.ScheduleService](#) method.

Perform a time zone conversion to convert *dateTime* values to UTC before they are updated in the database.

`getABSLOTS(serviceID, policyId, calendar, tz, sortBy, exactAppointment)`

Returns a list of *FSL.AppointmentBookingSlot* records that respect complex work dependencies for a chain of two service appointments.

Signature

```
public static FSL.ABSlotsResponse getABSLOTS(Id serviceID, Id policyId, OperatingHours
calendar, System.TimeZone tz, String sortBy, Boolean exactAppointment)
```

Parameters

serviceID

Type: [Id](#)

Required. The ID of the service appointment being scheduled.

policyId

Type: [Id](#)

Required. The ID of the scheduling policy being used.

calendar

Type: [OperatingHours](#) object

Required. The *calendar* is used to determine time slot intervals.



Note: The *TimeZone* on the operating hours record is ignored.

tz

Type: [System.TimeZone](#)

Required. The time zone in which the slots are returned. This time zone is normally the time zone of the service territory in which the service appointment is performed—in other words, the customer’s location. Appointment booking slots must be displayed in the time zone of the customer’s location.

sortBy

Type: [String](#)

Required. Used to sort the results. Acceptable values are SORT_BY_GRADE, SORT_BY_DATE, and SORT_BY_NO_SORT.

exactAppointment

Type: [Boolean](#)

Required. Specifies whether the result uses exact appointments or an arrival window. When this method is called, the *exactAppointment* value on the work type is ignored.

Return Value

Type: [FSL.ABSlotsResponse](#)

Usage

This method is used to retrieve appointment booking slots for a complex work chain of two appointments. This method respects the complex work setting **Use all-or-none scheduling for related appointments**.

This method is asynchronous. To examine results that this method returns, you can use the streaming API and subscribe to *MstCompletedChannel*, the channel for the FSL managed package.

This method only returns available slots and doesn’t schedule the service appointment. Update the *ArrivalWindowStartTime* and *ArrivalWindowEndTime* properties on the service appointment and call the [scheduleExtended](#) method of the [FSLScheduleService](#) class.

Perform a time zone conversion to convert *dateTime* values to UTC before they are updated in the database.

SEE ALSO:

[Example: Subscribe to and Replay Events Using a Visualforce Page](#)

AppointmentBookingSlot Class

Represents a booking slot available for a given service appointment. An instance of this class is part of the results returned by the [AppointmentBookingService](#) and [GradeSlotsService](#) classes.

Namespace

[FSL](#)

Example

The debug log shows the relevant parts of the result: `Grade` and `Interval`. The `BestSlotGrades` parameters are private and inaccessible via code.

```
AppointmentBookingSlot:
[
  Grade=85.1851851851851851851851851852,
  Interval=TimeInterval:
  [
    2018-01-26 09:00:00,2018-01-26 11:00:00
  ]
]
```

IN THIS SECTION:

[AppointmentBookingSlot Properties](#)

AppointmentBookingSlot Properties

`AppointmentBookingSlot` contains the following properties.

IN THIS SECTION:

[grade](#)

The grade of the available appointment booking slot.

[interval](#)

The time frame of the returned appointment booking slot.

grade

The grade of the available appointment booking slot.

Signature

```
public Decimal grade {get; set;}
```

Property Value

Type: [Decimal](#)

interval

The time frame of the returned appointment booking slot.

Signature

```
public FSL.TimeInterval interval {get; set;}
```

Property Value

Type: [FSL.TimeInterval](#)

GradeSlotsService Class

Represents the results shown in the Candidates quick action. Use the `GradeSlotsService` class to evaluate all possible slots where a given service appointment can be scheduled.

Namespace

[FSL](#)

IN THIS SECTION:

[GradeSlotsService Constructors](#)

[GradeSlotsService Methods](#)

GradeSlotsService Constructors

The following are constructors for `GradeSlotsService`.

IN THIS SECTION:

[GradeSlotsService\(schedulingPolicyId, serviceAppointmentId\)](#)

Creates a new instance of the `GradeSlotsService` class using the specified scheduling policy ID and service appointment ID.

GradeSlotsService(schedulingPolicyId, serviceAppointmentId)

Creates a new instance of the `GradeSlotsService` class using the specified scheduling policy ID and service appointment ID.

Signature

```
public GradeSlotsService(Id schedulingPolicyId, Id serviceAppointmentId)
```

Parameters

schedulingPolicyId

Type: [Id](#)

The record ID of the scheduling policy being used to schedule the service appointment.

serviceAppointmentId

Type: [Id](#)

The record ID of the service appointment being scheduled.

GradeSlotsService Methods

`GradeSlotsService` includes the following static method.

IN THIS SECTION:

[getGradedMatrix\(i_ResultsInUserTimeZone\)](#)

Returns a matrix of resource IDs and graded time slots. The information is similar to that shown in the Candidates quick action.

getGradedMatrix(i_ResultsInUserTimeZone)

Returns a matrix of resource IDs and graded time slots. The information is similar to that shown in the Candidates quick action.

Signature

```
public FSL.AdvancedGapMatrix getGradedMatrix(Boolean i_ResultsInUserTimeZone)
```

Parameters

i_ResultsInUserTimeZone

Type: [Boolean](#)

If **true**, all DateTimes are returned in the user's time zone. If **false**, all DateTimes are returned in UTC.

Return Value

Type: [FSL.AdvancedGapMatrix](#)

Example

This example illustrates how to parse the results in the `FSL.AdvancedGapMatrix` to extract the service resource ID, start and end times, and grade of each slot.

```
// FSL.GradeSlotsService class
// The getGradedMatrix method returns a matrix of resource id's AND graded time slots

Id serviceAppointmentId = '08p1N000000qN4sQAE';
Id schedulingPolicyId=[SELECT Id FROM FSL__Scheduling_Policy__c WHERE Name='Customer First'
LIMIT 1].Id;

// GENERATE the graded time slots for the service appointment
FSL.GradeSlotsService mySlotService = new
FSL.GradeSlotsService(schedulingPolicyId,serviceAppointmentId);

// STORE the matrix of service resource id's and graded time slots
FSL.AdvancedGapMatrix myResultMatrix = mySlotService.getGradedMatrix(true);

Map<Id,FSL.ResourceScheduleData> mySRGradedTimeSlotMap =
myResultMatrix.ResourceIDToScheduleData;
for (Id thisresourceid : mySRGradedTimeSlotMap.keySet()){
    for (FSL.SchedulingOption thisso :
mySRGradedTimeSlotMap.get(thisresourceid).SchedulingOptions ) {
        system.debug('***** Resource Id' + thisresourceid);
        system.debug('***** Start - ' + thisso.Interval.Start);
        system.debug('***** Finish - ' + thisso.Interval.Finish);
        system.debug('***** Grade - ' + thisso.Grade);
    }
}
```

OAAS Class

Contains all the methods used in the available optimization services, such as global or in-day optimizations, reshuffle operations, and resource schedule optimizations.

Namespace

FSL

IN THIS SECTION:

[OAAS Methods](#)

OAAS Methods

OAAS includes the following methods.

IN THIS SECTION:

[optimize\(request\)](#)

Returns the optimization request ID of the global optimization process that was triggered. If the scheduling policy includes an in-day optimization Boolean that's set to true, the request triggers an in-day optimization.

[reshuffle\(serviceld, policyId\)](#)

Returns the optimization request ID of a reshuffle operation that has begun on a given service appointment.

[resourceDayOptimization\(resourceId, policyId, horizon, includeAllTasks, includeOnlyResourceFutureSA, radius, candidateSasFields, unschedulableServicesField, maxOptRuntime\)](#)

Returns the optimization request ID with the details of the optimization call. This method runs resource schedule optimization—the optimization of a single service resource's schedule—using the parameters provided.

[resourceDayOptimization\(resourceId, policyId, horizon, includeAllTasks, includeOnlyResourceFutureSA, radius, candidateSasFields, unschedulableServicesField, maxOptRuntime, nowTimeOnSchedule\)](#)

Returns the optimization request ID with the details of the optimization call. This method runs resource schedule optimization—the optimization of a single service resource's schedule—using the parameters provided.

[resourceDayOptimization\(resourceId, policyId, horizon, includeAllTasks, includeOnlyResourceFutureSA, radius, candidateSas, unschedulableServices, maxOptRuntime\)](#)

Returns the optimization request ID with the details of the optimization call. This method runs resource schedule optimization—the optimization of a single service resource's schedule—using the parameters provided.

[resourceDayOptimization\(resourceId, policyId, horizon, includeAllTasks, includeOnlyResourceFutureSA, radius, candidateSas, unschedulableServices, maxOptRuntime, nowTimeOnSchedule\)](#)

Returns the optimization request ID with the details of the optimization call. This method runs resource schedule optimization—the optimization of a single service resource's schedule—using the parameters provided.

optimize(request)

Returns the optimization request ID of the global optimization process that was triggered. If the scheduling policy includes an in-day optimization Boolean that's set to true, the request triggers an in-day optimization.

Signature

```
public static Id optimize(FSL.OAASRequest request)
```

Parameters

request

Type: [FSL.OAASRequest](#)

The optimization request.

Return Value

Type: [Id](#)

Record ID of the optimization request.

Example

This example creates an instance of the `OAASRequest` class that holds all the details of the optimization call being initiated. Next, the example calls the `optimize` method and passes in the request.

```
DateTime start=Datetime.now();
DateTime finish=Datetime.now().addDays(3);

LIST<Id> lstServiceTerritories = new List<Id>();
lstServiceTerritories.add('0Hh0b000000cIwsCAE');

FSL.OAASRequest oaasRequest = new FSL.OAASRequest();
oaasRequest.allTasksMode = true;
oaasRequest.filterFieldAPIName = null;
oaasRequest.start = start;
oaasRequest.finish = finish;
oaasRequest.includeServicesWithEmptyLocation = false;
oaasRequest.locations = lstServiceTerritories;
oaasRequest.schedulingPolicyID = 'a0N4E0000031HKkUAM';

FSL.OAAS oaas = new FSL.OAAS();
id optRequest = oaas.optimize(oaasRequest);
```

reshuffle(serviceId, policyId)

Returns the optimization request ID of a reshuffle operation that has begun on a given service appointment.

Signature

```
public static Id reshuffle(Id serviceId, Id policyId)
```

Parameters

serviceId

Type: [Id](#)

The record ID of the service appointment that must be scheduled.

policyId

Type: [Id](#)

The record ID of the scheduling policy being used to schedule the service appointment.

Return Value

Type: [Id](#)

Record ID of the optimization request.

Usage

The Reshuffle action is used when a high-priority service appointment must be scheduled within a full schedule. It runs a “mini-optimization” that attempts to reshuffle the schedule to accommodate the appointment.

To learn more about the Reshuffle action, see [Reschedule Service Appointments](#).

Example

```
FSL.OAAS oaas = new FSL.OAAS();
id optRequest = oaas.reshuffle('08p4E000000M21CQAS', 'a0N4E0000031HKkUAM');
```

resourceDayOptimization(resourceId, policyId, horizon, includeAllTasks, includeOnlyResourceFutureSA, radius, candidateSasFields, unschedulableServicesField, maxOptRuntime)

Returns the optimization request ID with the details of the optimization call. This method runs resource schedule optimization—the optimization of a single service resource’s schedule—using the parameters provided.

Signature

```
public static Id resourceDayOptimization(Id resourceId, Id policyId, FSL.TimeInterval
horizon, Boolean includeAllTasks, Boolean includeOnlyResourceFutureSA, Decimal radius,
String candidateSasFields, String unschedulableServicesField, Decimal maxOptRuntime)
```

Parameters

resourceId

Type: [Id](#)

The record ID of the service resource whose schedule is being optimized.

policyId

Type: [Id](#)

The record ID of the scheduling policy being used to schedule the service appointment.

horizon

Type: [FSL.TimeInterval](#)

The time frame used to run resource schedule optimization.

includeAllTasks

Type: [Boolean](#)

If **true**, all relevant service appointments within the time frame are considered during optimization. If **false**, only unscheduled service appointments are considered, and all scheduled service appointments are pinned (unmovable).

includeOnlyResourceFutureSA

Type: **Boolean**

If **true**, only service appointments that are already assigned to the service resource are considered during optimization. If **false**, service appointments assigned to other service resources are also considered.

radius

Type: **Decimal**

The suggested distance between required service appointments and adjacent appointments. Required appointments are defined by the `unschedulableServicesField` parameter. Resource schedule optimization tries to group service appointments so that their distance from a required appointment is less than this radius. Appointments that are further from a required appointment can still be scheduled, but are deprioritized. If **null**, the data is not filtered based on the radius.

candidateSasFields

Type: **String**

Boolean service appointment field that indicates which appointments are candidates to be scheduled.

unschedulableServicesField

Type: **String**

Boolean service appointment field that indicates whether a service appointment is required (pinned), meaning it must remain on the schedule during resource schedule optimization.

maxOptRuntime

Type: **Decimal**

Total time in seconds during which the optimization results must be returned. This parameter only enforces the optimization time, and does not include optimization queue or Apex job queue times. If **null**, the default value of 30 seconds is used.

Usage

To learn more about resource schedule optimization, see [Optimize a Single Resource's Schedule](#).

Return Value

Type: **Id**

Record ID of the optimization request.

resourceDayOptimization(resourceId, policyId, horizon, includeAllTasks, includeOnlyResourceFutureSA, radius, candidateSasFields, unschedulableServicesField, maxOptRuntime, nowTimeOnSchedule)

Returns the optimization request ID with the details of the optimization call. This method runs resource schedule optimization—the optimization of a single service resource's schedule—using the parameters provided.

Signature

```
public static Id resourceDayOptimization(Id resourceId, Id policyId, FSL.TimeInterval
horizon, Boolean includeAllTasks, Boolean includeOnlyResourceFutureSA, Decimal radius,
String candidateSasFields, String unschedulableServicesField, Decimal maxOptRuntime,
Datetime nowTimeOnSchedule)
```

Parameters

*resourceId*Type: [Id](#)

The record ID of the service resource whose schedule is being optimized.

*policyId*Type: [Id](#)

The record ID of the scheduling policy being used to schedule the service appointment.

*horizon*Type: [FSL.TimeInterval](#)

The time frame used to run resource schedule optimization.

*includeAllTasks*Type: [Boolean](#)

If [true](#), all relevant service appointments within the time frame are considered during optimization. If [false](#), only unscheduled service appointments are considered, and all scheduled service appointments are pinned (unmovable).

*includeOnlyResourceFutureSA*Type: [Boolean](#)

If [true](#), only service appointments that are already assigned to the service resource are considered during optimization. If [false](#), service appointments assigned to other service resources are also considered.

*radius*Type: [Decimal](#)

The suggested distance between required service appointments and adjacent appointments. Required appointments are defined by the `unschedulableServicesField` and `nowTimeOnSchedule` parameters. Resource schedule optimization tries to group service appointments so that their distance from a required appointment is less than this radius. Appointments that are further from a required appointment can still be scheduled, but are deprioritized. If [null](#), the data is not filtered based on the radius.

*candidateSasFields*Type: [String](#)

Boolean service appointment field that indicates which appointments are candidates to be scheduled.

*unschedulableServicesField*Type: [String](#)

Boolean service appointment field that indicates whether a service appointment is required (pinned), meaning it must remain on the schedule during resource schedule optimization.

*maxOptRuntime*Type: [Decimal](#)

Total time in seconds during which the optimization results must be returned. This parameter only enforces the optimization time, and does not include optimization queue or Apex job queue times. If [null](#), the default value of 30 seconds is used.

*nowTimeOnSchedule*Type: [Datetime](#)

An appointment whose scheduled start time is earlier than this time is considered required and isn't updated during resource schedule optimization. Because resource schedule optimization is asynchronous, this parameter indicates when optimization was initiated. For example, if `nowTimeOnSchedule` is set to April 17, 2018, 10:30, appointments with an earlier scheduled start time are considered required and excluded from resource schedule optimization.

Return Value

Type: `Id`

Record ID of the optimization request.

Usage

To learn more about resource schedule optimization, see [Optimize a Single Resource's Schedule](#).

Example

To use this code sample, replace the ID placeholders—for example, *Service Appointment ID*—with record IDs from your org. Surround the IDs with single quotes: `'08p4E00000017Gq'`.

```
FSL.OAAS a = new FSL.OAAS();

//SET the horizon interval
DateTime start = DateTime.newInstanceGmt(DateTime.Now().dateGmt(),
Time.newInstance(0,0,0,0));
DateTime finish = start.addDays(3);
FSL.TimeInterval horizon = new FSL.TimeInterval(start,finish);

//SELECT the candidatesServices
List<ServiceAppointment> services = [SELECT Id FROM ServiceAppointment WHERE Id IN
    (Service Appointment ID,Service Appointment ID) ];
SET<Id> candidatesIds = new SET<Id>();
FOR(ServiceAppointment service : services) {
    candidatesIds.add(service.Id);
}

//SET the RSO required appointment services
Set<Id> requiredSaIds = new Set<Id>();
List<ServiceAppointment> services2 = [SELECT Id FROM ServiceAppointment WHERE Id=Service
Appointment ID];
FOR(ServiceAppointment service : services2) {
    requiredSaIds.add(service.Id);
}

//START the RSO process
Id requestId = a.resourceDayOptimization(Service Resource ID,Scheduling Policy ID,
horizon,false,true,50,candidatesIds,requiredSaIds,60,DateTime.newInstance(2018,1,0,0,0,0));
```

resourceDayOptimization(resourceId, policyId, horizon, includeAllTasks, includeOnlyResourceFutureSA, radius, candidateSas, unschedulableServices, maxOptRuntime)

Returns the optimization request ID with the details of the optimization call. This method runs resource schedule optimization—the optimization of a single service resource's schedule—using the parameters provided.

Signature

```
public static Id resourceDayOptimization(Id resourceId, Id policyId, FSL.TimeInterval horizon, Boolean includeAllTasks, Boolean includeOnlyResourceFutureSA, Decimal radius, Set<String> candidateSas, Set<String> unschedulableServices, Decimal maxOptRuntime)
```

Parameters

resourceId

Type: [Id](#)

The record ID of the service resource whose schedule is being optimized.

policyId

Type: [Id](#)

The record ID of the scheduling policy being used to schedule the service appointment.

horizon

Type: [FSL.TimeInterval](#)

The time frame used to run resource schedule optimization.

includeAllTasks

Type: [Boolean](#)

If [true](#), all relevant service appointments within the time frame are considered during optimization. If [false](#), only unscheduled service appointments are considered, and all scheduled service appointments are pinned (unmovable).

includeOnlyResourceFutureSA

Type: [Boolean](#)

If [true](#), only service appointments that are already assigned to the service resource are considered during optimization. If [false](#), service appointments assigned to other service resources are also considered.

radius

Type: [Decimal](#)

The suggested distance between required service appointments and adjacent appointments. Required appointments are defined by the *unschedulableServices* parameter. Resource schedule optimization tries to group service appointments so that their distance from a required appointment is less than this radius. Appointments that are further from a required appointment can still be scheduled, but are deprioritized. If [null](#), the data is not filtered based on the radius.

candidateSas

Type: [Set<Id>](#)

Set of IDs of service appointments that are candidates for scheduling.

unschedulableServices

Type: [Set<Id>](#)

Set of IDs of service appointments that are required (pinned), meaning they must remain on the schedule during resource schedule optimization

maxOptRuntime

Type: [Decimal](#)

Total time in seconds during which the optimization results must be returned. This parameter only enforces the optimization time, and does not include optimization queue or Apex job queue times. If [null](#), the default value of 30 seconds is used.

Usage

To learn more about resource schedule optimization, see [Optimize a Single Resource's Schedule](#).

Return Value

Type: [Id](#)

Record ID of the optimization request.

resourceDayOptimization(resourceId, policyId, horizon, includeAllTasks, includeOnlyResourceFutureSA, radius, candidateSas, unschedulableServices, maxOptRuntime, nowTimeOnSchedule)

Returns the optimization request ID with the details of the optimization call. This method runs resource schedule optimization—the optimization of a single service resource's schedule—using the parameters provided.

Signature

```
public static Id resourceDayOptimization(Id resourceId, Id policyId, FSL.TimeInterval
horizon, Boolean includeAllTasks, Boolean includeOnlyResourceFutureSA, Decimal radius,
Set<String> candidateSas, Set<String> unschedulableServices, Decimal maxOptRuntime,
Datetime nowTimeOnSchedule)
```

Parameters

resourceId

Type: [Id](#)

The record ID of the service resource whose schedule is being optimized.

policyId

Type: [Id](#)

The record ID of the scheduling policy being used to schedule the service appointment.

horizon

Type: [FSL.TimeInterval](#)

The time frame used to run resource schedule optimization.

includeAllTasks

Type: [Boolean](#)

If **true**, all relevant service appointments within the time frame are considered during optimization. If **false**, only unscheduled service appointments are considered, and all scheduled service appointments are pinned (unmovable).

includeOnlyResourceFutureSA

Type: [Boolean](#)

If **true**, only service appointments that are already assigned to the service resource are considered during optimization. If **false**, service appointments assigned to other service resources are also considered.

radius

Type: [Decimal](#)

The suggested distance between required service appointments and adjacent appointments. Required appointments are defined by the *unschedulableServices* and *nowTimeOnSchedule* parameters. Resource schedule optimization tries to group

service appointments so that their distance from a required appointment is less than this radius. Appointments that are further from a required appointment can still be scheduled, but are deprioritized. If `null`, the data is not filtered based on the radius.

candidateSas

Type: `Set<Id>`

Set of IDs of service appointments that are candidates for scheduling.

unschedulableServices

Type: `Set<Id>`

Set of IDs of service appointments that are required, meaning they must remain on the schedule during resource schedule optimization. These appointments may be moved to a different time slot, but they will continue to comply with their Earliest Start Permitted and Due Date values.

maxOptRuntime

Type: `Decimal`

Total time in seconds during which the optimization results must be returned. This parameter only enforces the optimization time, and does not include optimization queue or Apex job queue times. If `null`, the default value of 30 seconds is used.

nowTimeOnSchedule

Type: `Datetime`

Optional. An appointment whose scheduled start time is earlier than this time is considered required and isn't updated during resource schedule optimization. Because resource schedule optimization is asynchronous, this parameter indicates when optimization was initiated. For example, if `nowTimeOnSchedule` is set to April 17, 2018, 10:30, appointments with an earlier scheduled start time are considered required and excluded from resource schedule optimization.

Return Value

Type: `Id`

Record ID of the optimization request.

Usage

To learn more about resource schedule optimization, see [Optimize a Single Resource's Schedule](#).

Example

```
FSL.OAAS a = new FSL.OAAS();

//SET the horizon interval
DateTime start = DateTime.newInstanceGmt(DateTime.Now().dateGmt(),
Time.newInstance(0,0,0,0));
DateTime finish = start.addDays(3);
FSL.TimeInterval horizon = new FSL.TimeInterval(start,finish);

//SELECT the candidatesServices
List<ServiceAppointment> services = [SELECT Id FROM ServiceAppointment WHERE Id IN
('08p4E00000017Gp','08p4E00000017Go') ];
SET<Id> candidatesIds = new SET<Id>();
FOR(ServiceAppointment service : services) {
    candidatesIds.add(service.Id);
}
```



```
//SET the RSO required appointment services
Set<Id> requiredSaIds = new Set<Id>();
List<ServiceAppointment> services2 = [SELECT Id FROM ServiceAppointment WHERE
Id='08p4E00000017Gq'];
FOR(ServiceAppointment service : services2) {
    requiredSaIds.add(service.Id);
}

//START the RSO process
Id requestId =
a.resourceDayOptimization('0Hn4E0000004JRS','a1w4E000000Ac6S',horizon,false,true,50,
    candidatesIds,requiredSaIds,60,DateTime.newInstance(2018,1,0,0,0,0));
```

OAASRequest Class

Represents the request sent in the `OAAS.Optimize()` method. This class contains all the details of a global optimization call.

Namespace

[FSL](#)

IN THIS SECTION:

[OAASRequest Properties](#)

OAASRequest Properties

`OAASRequest` contains the following properties.

IN THIS SECTION:

[allTasksMode](#)

If `true`, all service appointments within the time frame are considered during optimization. If `false`, only unscheduled appointments are considered, and scheduled appointments are pinned (unmovable).

[filterFieldAPIName](#)

The API name of a Boolean service appointment field. Only service appointments on which the Boolean field is set to `true` are optimized.

[start](#)

The start of the time frame in which the optimization process considers data for scheduling.

[finish](#)

The end of the time frame in which the optimization process considers data for scheduling.

[includeServicesWithEmptyLocation](#)

If `true`, service appointments both with and without an associated service territory are considered during optimization. If `false`, only appointments with an associated service territory are considered.

[locations](#)

A list of IDs of service territories for which optimization will run.

[numberOfServicesToSchedule](#)

Not currently in use. Leave as `null`.

[schedulingPolicyId](#)

The record ID of the scheduling policy that is used to schedule the service appointment.

allTasksMode

If **true**, all service appointments within the time frame are considered during optimization. If **false**, only unscheduled appointments are considered, and scheduled appointments are pinned (unmovable).

Signature

```
public Boolean allTasksMode {get; set;}
```

Property Value

Type: [Boolean](#)

filterFieldAPIName

The API name of a Boolean service appointment field. Only service appointments on which the Boolean field is set to **true** are optimized.

Signature

```
public String filterFieldAPIName {get; set;}
```

Property Value

Type: [String](#)

start

The start of the time frame in which the optimization process considers data for scheduling.

Signature

```
public Datetime start {get; set;}
```

Property Value

Type: [Datetime](#)

finish

The end of the time frame in which the optimization process considers data for scheduling.

Signature

```
public Datetime finish {get; set;}
```

Property Value

Type: [Datetime](#)

includeServicesWithEmptyLocation

If **true**, service appointments both with and without an associated service territory are considered during optimization. If **false**, only appointments with an associated service territory are considered.

Signature

```
public Boolean includeServicesWithEmptyLocation {get; set;}
```

Property Value

Type: [Boolean](#)

locations

A list of IDs of service territories for which optimization will run.

Signature

```
public List<Id> locations {get; set;}
```

Property Value

Type: [List<Id>](#)

numberOfServicesToSchedule

Not currently in use. Leave as **null**.

Signature

```
public Integer numberOfServicesToSchedule {get; set;}
```

Property Value

Type: [Integer](#)

schedulingPolicyId

The record ID of the scheduling policy that is used to schedule the service appointment.

Signature

```
public Id schedulingPolicyId {get; set;}
```

Property Value

Type: [Id](#)

PolygonUtils Class

Represents the result of using the `getTerritoryIdByPolygons` method to return a service territory record ID using latitude and longitude geolocation values. It also returns the map polygon record that the geocoded location is located in.

Namespace

FSL

Usage

Before calling the `PolygonUtils` class, make sure that you have existing map polygon records that are associated with a service territory.

If **Base service appointment territories on polygons** is enabled, global actions consume this class to populate the Service Territory field on service appointments. When standard FSL Global Actions are not being used, you can use the `getTerritoryIdByPolygons` method to populate the Service Territory lookup field on objects.

For more information, see [Create and Manage Map Polygons](#).

IN THIS SECTION:

[PolygonUtils Methods](#)

PolygonUtils Methods

`PolygonUtils` includes the following static method.

IN THIS SECTION:

[getTerritoryIdByPolygons\(longitude, latitude\)](#)

Returns a service territory record ID from longitude and latitude values.

getTerritoryIdByPolygons(longitude, latitude)

Returns a service territory record ID from longitude and latitude values.

Signature

```
static Id getTerritoryIdByPolygons(Double longitude, Double latitude)
```

Parameters

longitude

Type: [Double](#)

Required. The longitude value of the geolocation to be used to retrieve a service territory record ID via Polygon Classification.

latitude

Type: [Double](#)

Required. The latitude value of the geolocation to be used to retrieve a service territory record ID via Polygon Classification.

Return Value

Type: [Id](#)

Usage

This method returns a service territory record ID from longitude and latitude values.

Example

This example retrieves a service territory record ID using latitude and longitude geolocation fields.

```
//fetch Service Appointment record(s)
List<ServiceAppointment> sas = [select id, latitude, longitude from serviceappointment
where appointmentnumber = 'SA-3600' limit 1];
If(!sas.isEmpty()){
    //retrieve the service territory record id from the getTerritoryIdByPolygons method
    using geolocation fields from the first appointment in the list
    Id ServiceTerritoryId =
    FSL.PolygonUtils.getTerritoryIdByPolygons(double.valueOf(sas[0].longitude),double.valueOf(sas[0].latitude));

    system.debug(ServiceTerritoryId);
}
```

ResourceScheduleData Class

Contains all the details of a service resource's available slots for a given service appointment. An instance of this class is used only within the context of the results returned by the [AdvancedGapMatrix](#) class.

Namespace

[FSL](#)

Usage

For more information, see [AdvancedGapMatrix](#).

IN THIS SECTION:

[ResourceScheduleData Properties](#)

ResourceScheduleData Properties

`ResourceScheduleData` contains the following properties.

IN THIS SECTION:

[currentSlotsIndexInAB](#)

Index of the slot.

[resource](#)

Not currently in use.

[schedulingOptions](#)

A list of all possible scheduling options for the service resource.

currentSlotsIndexInAB

Index of the slot.

Signature

```
public Integer currentSlotsIndexInAB {get; set;}
```

Property Value

Type: [Integer](#)

resource

Not currently in use.

Signature

```
public FSL.EncapsulatedResource resource {get; set;}
```

Property Value

Type: FSL.EncapsulatedResource

schedulingOptions

A list of all possible scheduling options for the service resource.

Signature

```
public List<FSL.SchedulingOption> schedulingOptions {get; set;}
```

Property Value

Type: [List<FSL.SchedulingOption>](#)

ScheduleResult Class

Represents the result of scheduling a service appointment that is returned by the `ScheduleService.schedule` method.

Namespace

[FSL](#)

Example

This example shows the contents of a returned `ScheduledResult` object.

```
BreakObject=null,
Grade=100.000000000000000000000000000000,
LongOperationId=null,
PartialResults=(),
Resource=ServiceResource:
{Id=0Hn4E0000004bucSAA, Name=Crew A, IsActive=true, IsCapacityBased=false, ResourceType=C,
ServiceCrewId=1cr4E0000004CM7QAM, Contractor_Priority__c=2},
Service=ServiceAppointment:
{Id=08p4E000000LeMiQAK, Status=None, FSL__Same_Day__c=false, FSL__Same_Resource__c=false,
AppointmentNumber=SA-6214, DueDate=2018-09-20 17:07:00, EarliestStartTime=2018-09-17
17:07:00, Duration=1.5, DurationType=Hours, Latitude=37.793872000000000,
Longitude=-122.394865000000000, FSL__InternalSLRGeolocation__Latitude__s=37.793834,
FSL__InternalSLRGeolocation__Longitude__s=-122.395123, ServiceTerritoryId=0Hh4E00000000tPSAU,
FSL__Schedule_over_lower_priority_appointment__c=false, FSL__Use_Async_Logic__c=false,
FSL__IsMultiDay__c=false, ParentRecordId=0WO4E000000Vl6rWAC, FSL__Emergency__c=false,
SchedStartTime=2018-09-17 17:13:00, SchedEndTime=2018-09-17 18:43:00,
FSL__Schedule_Mode__c=Automatic, FSL__Scheduling_Policy_Used__c=a0N4E0000031HPVUA2}
1
```

IN THIS SECTION:

ScheduleResult Properties

ScheduleResult Properties

`ScheduleResult` contains the following properties.

IN THIS SECTION:

breakObject

Not currently in use.

grade

The grade of the slot in which the service appointment was scheduled.

longOperationId

Populated only when scheduling a chain of two service appointments, also known as complex work. An asynchronous call is made to schedule both service appointments in the chain. This property contains the `FSL` `FSL Operation` `c ID`.

partialResults

Relevant only when Limit Apex Operations is enabled in the Field Service Admin app. If the processing time of the `ScheduleService` is about to exceed the maximum CPU limits, `partialResults` returns the results that were already calculated and halts the process. This list contains the details of the partial, processed results.

serviceResource

The service resource assigned to the service appointment.

serviceAppointment

The scheduled service appointment.

breakObject

Not currently in use.

Signature

```
public ResourceAbsence breakObject {get; set;}
```

Property Value

Type: ResourceAbsence

grade

The grade of the slot in which the service appointment was scheduled.

Signature

```
public Decimal grade {get; set;}
```

Property Value

Type: [Decimal](#)

longOperationId

Populated only when scheduling a chain of two service appointments, also known as complex work. An asynchronous call is made to schedule both service appointments in the chain. This property contains the `FSL__FSL_Operation__c` ID.

Signature

```
public Id longOperationId {get; set;}
```

Property Value

Type: [Id](#)

Usage

To learn more about the complex work feature, see [Create a Chain of Related Service Appointments for Field Service](#).

partialResults

Relevant only when Limit Apex Operations is enabled in the Field Service Admin app. If the processing time of the `ScheduleService` is about to exceed the maximum CPU limits, `partialResults` returns the results that were already calculated and halts the process. This list contains the details of the partial, processed results.

Signature

```
public List<FSL.PartialResultsInfo> partialResults {get; set;}
```


Property Value

Type: [List<FSL.PartialResultsInfo>](#)

serviceResource

The service resource assigned to the service appointment.

Signature

```
public ServiceResource serviceResource {get; set;}
```

Property Value

Type: ServiceResource

serviceAppointment

The scheduled service appointment.

Signature

```
public ServiceAppointment serviceAppointment {get; set;}
```

Property Value

Type: ServiceAppointment

ScheduleService Class

Represents the scheduling of a given service appointment in the best available slot based on the applied scheduling policy.

Namespace

[FSL](#)

Usage

This class calls the scheduling engine and schedules the given service appointment in the highest-scoring available slot.

IN THIS SECTION:

[ScheduleService Methods](#)

ScheduleService Methods

`ScheduleService` includes the following static methods.

IN THIS SECTION:

`schedule(policy, serviceId)`

Returns `FSL.ScheduleResult` with the result of the scheduling process.

`scheduleExtended(policy, serviceId)`

Returns `FSL.ScheduleResult` with the result of the scheduling process for appointments in a complex work chain.

`schedule(policy, serviceId)`

Returns `FSL.ScheduleResult` with the result of the scheduling process.

Signature

```
public static FSL.ScheduleResult schedule(Id policy, Id serviceId)
```

Parameters

policy

Type: `Id`

The record ID of the scheduling policy being used to schedule the service appointment.

serviceId

Type: `Id`

The record ID of the service appointment being scheduled.

Return Value

Type: `FSL.ScheduleResult`

Usage

This method schedules the service appointment in the best available slot. If there are no available slots, the appointment isn't scheduled. This method can be called with only one service appointment at a time. To schedule multiple service appointments, use an Apex batch class. Call this method in batches of one.

If you are using the `schedule` method with the appointment booking method, perform a time zone conversion. The results of appointment booking are returned in the time zone specified in the method signature. Convert these values back to UTC.

Example

```
// FSL.ScheduleService class
// The Schedule method returns a ScheduleResult result
FSL.ScheduleResult myResult = new FSL.ScheduleResult();

// static FSL.ScheduleResult Schedule(Scheduling Policy ID, Service Appointment ID)
myResult = FSL.ScheduleService.schedule(Scheduling Policy ID, Service Appointment ID);

System.debug(myResult);
```

`scheduleExtended(policy, serviceId)`

Returns `FSL.ScheduleResult` with the result of the scheduling process for appointments in a complex work chain.

Signature

```
public static FSL.ScheduleResult scheduleExtended(Id policy, Id serviceId)
```

Parameters

policy

Type: `Id`

The record ID of the scheduling policy that's used to schedule the service appointment.

serviceId

Type: `Id`

The record ID of a service appointment in a complex work chain of two appointments that are being scheduled.

Return Value

Type: `FSL.ScheduleResult`

Usage

Use this method to schedule two service appointments in a complex work chain. This method respects the complex work setting **Use all-or-none scheduling for related appointments**. If there are no available slots, appointments in the complex work chain aren't scheduled.

The `scheduleExtended` method is valid for a chain of two appointments; if the appointment in *serviceId* has dependencies with more than one other appointment, scheduling results can be different than expected.

This method can be called with only one service appointment at a time, and runs asynchronously. To examine results that this method returns, you can use the streaming API and subscribe to `MstCompletedChannel`, the channel for the FSL managed package.

If you are using the `scheduleExtended` method with the appointment booking method, perform a time zone conversion. The results of appointment booking are returned in the time zone specified in the method signature. Convert these values back to UTC.

SEE ALSO:

[Example: Subscribe to and Replay Events Using a Visualforce Page](#)

SchedulingOption Class

Provides the details of an individual slot available for scheduling. Represents a run-time object used within the context of the results returned in the `AdvancedGapMatrix` class.

Namespace

[FSL](#)

IN THIS SECTION:

[SchedulingOption Properties](#)

SchedulingOption Properties

`SchedulingOption` contains the following properties.

IN THIS SECTION:

[grade](#)

The grade of the available slot.

[interval](#)

The time frame of the returned slot.

grade

The grade of the available slot.

Signature

```
public Decimal grade {get; set;}
```

Property Value

Type: [Decimal](#)

interval

The time frame of the returned slot.

Signature

```
public FSL.TimeInterval interval {get; set;}
```

Property Value

Type: [FSL.TimeInterval](#)

TimeInterval Class

Holds an interval's start and end times. An instance of this class is used when capturing the start and end times of a scheduling horizon, during which a scheduling process runs. It considers scheduled jobs and is also used to represent the start and end times of an appointment slot or window.

Namespace

[FSL](#)

IN THIS SECTION:

[TimeInterval Properties](#)

[TimeInterval Methods](#)

TimeInterval Properties

`TimeInterval` contains the following properties.

IN THIS SECTION:

[start](#)

The start time of the `TimeInterval` class.

[finish](#)

The end time of the `TimeInterval` class.

start

The start time of the `TimeInterval` class.

Signature

```
public Datetime start {get; set;}
```

Property Value

Type: [Datetime](#)

finish

The end time of the `TimeInterval` class.

Signature

```
public Datetime finish {get; set;}
```

Property Value

Type: [Datetime](#)

TimeInterval Methods

`TimeInterval` includes the following method.

IN THIS SECTION:

[toString\(\)](#)

Returns the start and end datetimes as a string.

toString()

Returns the start and end datetimes as a string.

Signature

```
public String toString()
```

Return Value

Type: [String](#)

Field Service Lightning Code Samples

Use these code samples to get started working programmatically with Field Service Lightning features.

IN THIS SECTION:

[Generate Work Orders on Maintenance Plans with Apex](#)

The **Generate Work Orders** action on maintenance plans can also be called using Apex code. The following code sample creates work order records by making an Apex callout to the `generateWorkOrder` action REST API resource.

[Create a Service Report with Apex](#)

The **Create Service Report** action on work orders, work order line items, and service appointments can also be called using Apex code. The following code sample creates a service report with two signatures by making an Apex callout to the `createServiceReport` action REST API resource.

[Apex Trigger: Auto-Close Cases with Closed Work Orders](#)

The following trigger automatically closes cases when a work order linked to the case is marked Closed. It saves support agents from having to manually close a case after the related work is complete.

[Apex Trigger: Prevent Closure of Work Orders with Open Line Items](#)

The following trigger prevents users from closing a work order unless all its line items have been closed. It's a good way to ensure that all scheduled tasks are completed. The accompanying unit test scans your code for issues.

[Apex Trigger: Send Email when Service Report is Created](#)

The following trigger sends an email to a specified email address when a service report is created in your org. For example, you may want your payroll department to be notified whenever a service report is created.

[Apex Class: Create a Work Order with a Work Order Line Item](#)

Apex classes reduce the size of your triggers and make it easier to reuse and maintain Apex code. This class, which you can reference in triggers, creates a work order with one line item.

[Code Samples: Dispatcher Console Custom Actions](#)

Learn how to configure Apex classes or Visualforce pages that you want to link to a custom action in the dispatcher console.

Generate Work Orders on Maintenance Plans with Apex

The **Generate Work Orders** action on maintenance plans can also be called using Apex code. The following code sample creates work order records by making an Apex callout to the `generateWorkOrder` action REST API resource.

You can use this code sample in several different ways:

- Add it to Apex controller code for an Aura component, and tie it to a custom UI or app functionality
- Use it in an Apex trigger to semi-automate the creation of the work orders (for example, whenever a maintenance plan is created or updated)
- Use it in an Apex REST service to create work orders when called from an external integration service



Note:

- This code sample assumes that you have remote site settings enabled to make REST callouts. For more information, see [Adding Remote Site Settings](#).

- The mock maintenance plan ID in the code sample is *1MPR000000000Bu*.
- This code sample references API version 45.0, but can be used with any version from 40.0 onward.

```
String salesforceHost = System.Url.getSalesforceBaseUrl().toExternalForm();
String url = salesforceHost + '/services/data/v45.0/actions/standard/generateWorkOrders';

// Create HTTP request
HttpRequest request = new HttpRequest();
request.setEndpoint(url);
request.setMethod('POST');
request.setHeader('Content-Type', 'application/json;charset=UTF-8');
request.setHeader('Authorization', 'OAuth ' + UserInfo.getSessionId());
// Set the body as a JSON object
request.setBody('{"inputs" : [{"recordId" : "1MPR000000000Bu"}]}');
Http http = new Http();
HttpResponse response = http.send(request);
// Parse the JSON response
if (response.getStatusCode() != 201) {
    System.debug('The status code returned was not expected: ' +
        response.getStatusCode() + ' ' + response.getStatus());
} else {
    System.debug(response.getBody());
}
```

Create a Service Report with Apex

The **Create Service Report** action on work orders, work order line items, and service appointments can also be called using Apex code. The following code sample creates a service report with two signatures by making an Apex callout to the *createServiceReport* action REST API resource.

Each service report contains data from its parent record and signatures from customers, technicians, or others who need to sign off on the work. In your API call, you can define one or more signatures to be used in the report. The number and type of signatures must match the service report template's signature settings.

Note:

- This code sample applies to API version 41.0 and later. Service reports generated with API version 40.0 can contain only one signature.
- This code sample assumes that you have remote site settings enabled to make REST callouts. For more information, see [Adding Remote Site Settings](#).
- The mock record ID in the code sample is *0WOxx000000001E*. The mock service report template ID is *0SLR00000004DBFOA2*.

API Endpoint (v41.0): /services/data/v41.0/actions/standard/createServiceReport

```
{
  "inputs" : [ {
    "entityId" : "0WOxx000000001E",
    "signatures" : [
      { "data": "Base64 code for the captured signature image",
        "contentType": "image/png",
```

```

        "name": "Customer Signature",
        "signatureType": "Customer",
        "place": "San Francisco",
        "signedBy": "John Doe",
        "signedDate": "Thu Jul 13 22:34:43 GMT 2017"
    },
    {
        "data": "Base64 code for the captured signature image",
        "contentType": "image/png",
        "name": "Technician Signature",
        "signatureType": "Technician"
    }
],
"templateId" : "0SLR00000004DBFOA2"
} ]
}

```

Field Descriptions

- **entityId**—The ID of the work order, work order line item, or service report for which you want to create the service report.
- **signatures**—A list of JSON definitions for a digital signature.
 - **data**—(Required) The base64 code for an image.
 - **contentType**—(Required) The file type of the signature.
 - **signatureType**—(Required) The role of the person signing; for example, “Customer.” Signature Type picklist values are defined by the Salesforce admin ahead of time. Each signature block must use a different signature type, and the signature types you define in your call must match the service report template’s signature types.
 - **name**—The signature block title. This value appears on the generated service report.
 - **place**—The place of signing. This value appears on the generated service report.
 - **signedBy**—The name of the person signing. This value appears on the generated service report.
 - **signedDate**—The date of signing. This value appears on the generated service report.
- **templateId**—The ID of the service report template used for the report. To find the ID, run a SOQL query on the ServiceReportLayout object in Workbench.

Apex Trigger: Auto-Close Cases with Closed Work Orders

The following trigger automatically closes cases when a work order linked to the case is marked Closed. It saves support agents from having to manually close a case after the related work is complete.



Note: If a case has multiple work orders, the trigger fires the first time any related work order is marked Closed.

```

trigger CloseCaseOnWorkOrderUpdate on WorkOrder (after update) {
    // Query all the cases whose work order ID is the incoming work order
    List<Case> casesToUpdate = [select Id, Status from Case
                                where Id IN (select caseId from WorkOrder
                                                where Id IN :Trigger.newMap.keySet()
                                                and Status = 'closed')];

    // Set the case status to closed
    for (Case c : casesToUpdate) {
        c.status = 'closed';
    }
}

```



```

    }
    update casesToUpdate;
}

```

You can set up Apex unit tests in the developer console to scan your code for any issues. To keep things running smoothly, Salesforce requires at least three-quarters of your Apex code lines to be covered by tests. The following unit test applies to this trigger.

```

@Test
private class WOTriggerTest {
    static testMethod void validateWO() {
        Case ca = new Case();
        ca.Origin = 'Phone';
        ca.Status = 'new';
        insert(ca);
        WorkOrder wo = new WorkOrder();
        wo.Subject = 'test';
        wo.Status = 'closed';
        wo.CaseId = ca.Id;
        insert(wo);
        update(wo);
        Case cal = [SELECT Status from Case where id= :ca.Id];
        System.assertEquals('Closed', cal.Status);
    }
}

```

Apex Trigger: Prevent Closure of Work Orders with Open Line Items

The following trigger prevents users from closing a work order unless all its line items have been closed. It's a good way to ensure that all scheduled tasks are completed. The accompanying unit test scans your code for issues.

To define a work order trigger in your org:

1. In Lightning Experience, select **Work Order** in the Object Manager in Setup, then click **Triggers**. In Salesforce Classic, enter *Work Orders* in the Quick Find box in Setup, then click **Triggers** under Work Orders.
2. Click **New**.
3. Copy the trigger text and paste it into the text field.
4. Click **Save**.

```

trigger ValidateWorkOrderLineItem on WorkOrder (before update) {
    // Create a map of work order Id to workorders where status is closed
    Map<String, WorkOrder> mapWoToId = new Map<String, WorkOrder>();
    for(WorkOrder w : Trigger.New) {
        if(w.Status == 'Closed'){
            mapWoToId.put(w.Id, w);
        }
    }

    // Select the work order line items which are not closed for the list of work orders
    List<WorkOrderLineItem> woLineItemList = [select woli.Status, woli.workOrderId
                                              from WorkOrderLineItem woli
                                              where woli.WorkOrderId IN :mapWoToId.keySet() and woli.Status !=
'Closed'];
}

```

```
// Set the error message for the parent work order
for(WorkOrderLineItem woli : woLineItemList) {
    WorkOrder parentWO = mapWoToId.get(woli.workOrderId);
    parentWO.addError('You cannot close a work order until all of its line items are
closed.');
```

Apex Trigger: Send Email when Service Report is Created

The following trigger sends an email to a specified email address when a service report is created in your org. For example, you may want your payroll department to be notified whenever a service report is created.

This trigger includes the ID of the service report's parent record. To use this trigger in your org, replace *admin@myorg.com* with the desired email address.

```
trigger sendEmail on ServiceReport (after insert) {
    List<Messaging.SingleEmailMessage> mails = new List<Messaging.SingleEmailMessage>();

    List<String> sendTo = new List<String>();
    sendTo.add('admin@myorg.com');
    for(ServiceReport sr : trigger.new){
        Messaging.SingleEmailMessage mail = new Messaging.SingleEmailMessage();
        mail.setToAddresses(sendTo);
        mail.setSubject('Service Report Created for Record ID: ' + sr.ParentId);
        String body = 'A service report was created.';
        mail.setHtmlBody(body);
        mails.add(mail);
    }
    Messaging.sendEmail(mails);
}
```

Apex Class: Create a Work Order with a Work Order Line Item

Apex classes reduce the size of your triggers and make it easier to reuse and maintain Apex code. This class, which you can reference in triggers, creates a work order with one line item.

```
public class CreateWorkOrderLineItem{
    public WorkOrderLineItem createWorkOrderLineItem() {
        WorkOrder wo = new WorkOrder();
        wo.subject = 'title';
        insert wo;
        WorkOrderLineItem woli = new WorkOrderLineItem();
        woli.workOrderId = wo.Id;
        woli.description = 'abcd';
        return woli;
    }
}
```

The following unit test applies to the Apex class.

```
@isTest
public class TestWorkOrderLineItem {
```

```

static testMethod void testCreateWorkOrderLineItem()
{
    CreateWorkOrderLineItem cwoLi = new CreateWorkOrderLineItem();
    cwoLi.createWorkOrderLineItem();
}
}

```

Code Samples: Dispatcher Console Custom Actions

Learn how to configure Apex classes or Visualforce pages that you want to link to a custom action in the dispatcher console.

Custom actions can either call an Apex class or open a Visualforce page, and can be run on records in several areas of the dispatcher console. To learn how to create custom actions, see [Create Custom Actions for the Dispatcher Console](#).



Note: All Apex classes implementing the quick action interfaces must be declared as Global to be accessible from the dispatcher console.

Creating Apex Classes

When you create an Apex class to link to a dispatcher console custom action, implement one of the following three interfaces in your class.

| Interface | Description |
|-------------------------------------|--|
| CustomGanttServiceResourceAction | <p>For actions on service resources. The parameters are the service resource record ID, the service territory member record ID reflected on the Gantt, and the start and end dates of the current Gantt view. No additional parameters are included.</p> <p>Use the following format: <code>String action(Id resourceId, Id stmId, Datetime strGanttStartDate, Datetime strGanttEndDate, Map<String, Object> additionalParameters)</code></p> |
| CustomGanttServiceAppointmentAction | <p>For actions on service appointments. The parameters are the assigned resource record IDs—used for bulk actions—and the start and end dates of the current Gantt view. No additional parameters are included.</p> <p>Use the following format: <code>String action(List<Id> serviceAppointmentsIds, Datetime strGanttStartDate, Datetime strGanttEndDate, Map<String, Object> additionalParameters)</code></p> <p>When this action is implemented, multiple service appointments can be returned. In your method, we recommend creating an <code>if</code> statement to check how many IDs are returned. First, validate that at least one ID was returned: <code>serviceAppointmentsIds.size() > 1</code>. Then, you can</p> |

| Interface | Description |
|----------------------------------|---|
| | take different actions depending on whether 0, 1, or more appointment IDs were returned. |
| CustomGanttResourceAbsenceAction | <p>For actions on resource absences. The parameters are the resource absence record ID, the absence type ('na' or 'break'), and the start and end dates of the current Gantt view. No additional parameters are included.</p> <p>Use the following format: <code>String action(Id absenceId, String absenceType, Datetime strGanttStartDate, Datetime strGanttEndDate, Map<String, Object> additionalParameters)</code></p> |

These functions must be global and require that a string be returned. If the string isn't empty, it is used in the Gantt notification shown when a user clicks the related action.

Code Sample: Service Resource Custom Action

This action creates a resource absence of type Non Availability for the selected service resource that spans the days visible on the Gantt.

```
global class BlockResourceVisibleTime implements FSL.CustomGanttServiceResourceAction {

    global String action(Id resourceId, Id stmId, Datetime ganttStartDate, Datetime
ganttEndDate, Map<String, Object> additionalParameters) {

        ResourceAbsence na = new ResourceAbsence();

        // get Resource Absence record type - NA
        RecordType recordTypeNA = [
            SELECT
                Id, SubjectType, Name
            FROM
                RecordType
            WHERE
                DeveloperName =: 'Non_Availability'
                AND
                SObjectType =: ResourceAbsence.getSObjectType().getDescribe().getName()
        ];

        na.RecordTypeId = recordTypeNA.Id;
        na.ResourceId = resourceId;
        na.FSL__Approved__c = true;
        na.Start = ganttStartDate;
        na.End = ganttEndDate;

        insert na;

        ServiceResource resource = [SELECT Name FROM ServiceResource WHERE Id =: resourceId];
```

```

        return 'Blocked availability to ' + resource.Name + ' from ' +
ganttStartDate.format() + ' to ' + ganttEndDate.format();

    }

}

```

Code Sample: Service Appointment Custom Action

This action toggles the In Jeopardy field between True and False.

```

global class toggleServiceAppointmentJeopardy implements
FSL.CustomGanttServiceAppointmentAction {

    global String action(List<Id> serviceAppointmentsIds, Datetime ganttStartDate, Datetime
ganttEndDate, Map<String, Object> additionalParameters) {

        List<ServiceAppointment> saList = [SELECT FSL__InJeopardy__c, AppointmentNumber
FROM ServiceAppointment WHERE Id in : serviceAppointmentsIds];
        String reply = '';
        List<String> saNames = new List<String>();

        for (ServiceAppointment s : saList) {
            s.FSL__InJeopardy__c = !s.FSL__InJeopardy__c;
            saNames.add(s.AppointmentNumber);
        }

        upsert saList;

        reply = String.join(saNames, ', ');
        return 'Service Appointments successfully processed: ' + reply;
    }

}

```

Code Sample: Resource Absence Custom Action

For resource absences of type NA, this action creates a duplicate absence on the following day.

```

global class copyAbsenceToNextDay implements FSL.CustomGanttResourceAbsenceAction {

    global String action(Id absenceId, String absenceType, Datetime ganttStartDate, Datetime
ganttEndDate, Map<String, Object> additionalParameters) {

        ResourceAbsence resourceAbsence = [SELECT Id, AbsenceNumber, Start, End, ResourceId
FROM ResourceAbsence WHERE Id =: absenceId LIMIT 1];

        ResourceAbsence raClone = resourceAbsence.clone(false, true, false, false);
        raClone.Start = resourceAbsence.Start.addDays(1);
        raClone.End = resourceAbsence.End.addDays(1);
        raClone.ResourceId = resourceAbsence.ResourceId;

        insert raClone;

        return 'Resource Absence successfully copied.';
    }

}

```

```
}

```

Creating Visualforce Pages

When you create a Visualforce page, use the following GET parameters.

| For actions on... | Description |
|----------------------|---|
| Service appointments | <p>Use the following format: <code>services [if multiple], id (comma delimited if multiple), start (current Gantt start date, string), end (current Gantt end date, string)</code></p> <p>Example for a Visualforce page used to update a single service appointment: <code>?id=08p4E000000Kj5hQAC&start=5-7-2018&end=5-8-2018</code></p> <p>Example for a Visualforce page used to update multiple service appointments:</p> <p><code>?services=08p4E000000Kj5hQAC,08p4E000430Kj5hAPP&start=5-7-2018&end=5-8-2018</code></p> |
| Service resources | <p>Use the following format: <code>id, stm (ID of service resource's current service territory member record), start (current Gantt start date, string), end (current Gantt end date, string)</code></p> <p>Example: <code>?id=0Hn4E0000001OMQSA2&stm=0Hu4E0000005cpPSAQ&start=5-7-2018&end=5-8-2018</code></p> |
| Resource absences | <p>Use the following format: <code>id, type ('break' or 'na'), start (current Gantt start date, string), end (current Gantt end date, string)</code></p> <p>Example: <code>?id=0Hw4E00000091HSSAY&type=break&start=5-7-2018&end=5-8-2018</code></p> |

To close the Visualforce lightbox from your code, use: `parent.postMessage('closeLightbox','*');`



Note: Custom dispatcher console actions can't open Visualforce pages that are part of a managed package.

SEE ALSO:

[Create Custom Actions for the Dispatcher Console](#)

Field Service Lightning Mobile App

Configure mobile-specific features, like deep linking, for the Field Service app.

IN THIS SECTION:

[Configure Deep Linking for the Field Service Lightning Mobile App](#)

Your field technicians rely on their mobile devices to perform complex tasks, and some of those tasks require them to navigate between multiple apps or tabs. With deep linking, you can send users directly to a specific tab in the app.

Configure Deep Linking for the Field Service Lightning Mobile App

Your field technicians rely on their mobile devices to perform complex tasks, and some of those tasks require them to navigate between multiple apps or tabs. With deep linking, you can send users directly to a specific tab in the app.

Deep linking allows mobile apps to interact with each other using links called URIs, or Uniform Resource Identifiers. URIs have the power to point users to a specific location in a mobile app. Field Service has a pre-defined URI scheme that allows users to launch the Field Service app from a link in an email, website, or third-party application. An administrator or developer can create custom URIs to display specific tabs in the Field Service app. For example, you could integrate a third-party app that your field technicians use for billing.

If an unauthenticated user taps on a Field Service URI, they will be taken to the login screen. Once they log in, they need to tap the URI again to view the linked page.

IN THIS SECTION:

[Deep Linking Schema for the Field Service Lightning Mobile App](#)

Use the predefined URI schema for the Field Service Lightning mobile app on both Android and iOS devices.

Deep Linking Schema for the Field Service Lightning Mobile App

Use the predefined URI schema for the Field Service Lightning mobile app on both Android and iOS devices.

URI Schema Format

```
<com.salesforce.fieldservice>://v1/sObject/<id>/<action>
```

Let's break down each parameter of the URI scheme format.

- `com.salesforce.fieldservice`—The supported Salesforce schema name.
- `v1`—The current version of deep linking. This is a static value.
- `sObject`—Indicates a single instance of a Salesforce object. The schema supports all object types that are supported in the Field Service app, such as work order, service appointment, and assets.
- `id`—The unique single instance of a Salesforce object. `id` lengths of 15 and 18 characters are supported.
- `action`—A supported URI schema operation. The supported values are `details`, `related`, `products`, `feed`, and `location`. If no action is specified, URIs for work orders and service appointments will direct to the Overview tab. URIs for any other object type will direct to the Details tab.

Supported URI Schemes

com.salesforce.fieldservice://v1/sObject/<id>

Links to the Overview tab for work orders and service appointments. Links to the Details tab for all other object types.

Example: `com.salesforce.fieldservice://v1/sObject/0W05500000001UZGAA` links to the Overview tab for a work order.

com.salesforce.fieldservice://v1/sObject/<id>/details

Links to the Details tab for all object types.

Example: `com.salesforce.fieldservice://v1/sObject/0W05500000001UZGAA/details` links to the Details tab for a work order.

com.salesforce.fieldservice://v1/sObject/<id>/related

Links to the Related tab for all object types.

Example: `com.salesforce.fieldservice://v1/sObject/0W05500000001UZGAA/related` links to the Related tab for a work order.

com.salesforce.fieldservice://v1/sObject/<id>/products

Links to the Products tab for all applicable object types. If an object does not have a Products tab, it links to the Details tab instead.

Example: `com.salesforce.fieldservice://v1/sObject/0W05500000001UZGAA/products` links to the Products tab for a work order.

com.salesforce.fieldservice://v1/sObject/<id>/feed

Links to the Feed tab for all applicable object types. If an object does not have a Feed tab, it links to the Details tab instead.

Example: `com.salesforce.fieldservice://v1/sObject/0W05500000001UZGAA/feed` links to the Feed tab for a work order.

com.salesforce.fieldservice://v1/sObject/<id>/location

Links to the Location tab for all applicable object types. If an object does not have a Location tab, it links to the Details tab instead.

Example: `com.salesforce.fieldservice://v1/sObject/0W05500000001UZGAA/location` links to the Location tab for a work order.

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